

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1617.—VOL. XXXVI.

London, Saturday, August 18, 1866.

(STAMPED...SIXPENCE.
UNSTAMPED..FIVEPENCE.)

M R. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 23 years.)

Mr. CROFTS offers the FOLLOWING SHARES at net prices (all calls paid) :-
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* BANK RATE reduced to 8. TIN advanced £3 a ton. COPPER and LEAD no decline. Bankers: National Bank of Scotland, Finch-lane.

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JAMES LANE has FOR SALE at net prices :—5 Bassett and Grylls, 6s.; 10 Camborne Vean, 2s.; 20 Crebtor, 1s. (ex call); 10 Chiverton, 6s.; 5 Clifford, £2 1/2; 10 Chiverton Moor, £1 1/2; 20 Chontales, £2 1/2; 20 Central Minera, 6s.; 50 Caldbeck Fells, 2s. 6d.; 50 Central Snailbeach, 2s.; 10 East Caradon, £6 1/2; 60 East Jane, 1s.; 10 East Carn Brea, 2s. 6d.; 10 East Lovell, £6; 50 East Grenville, 2s.; 10 East Rosewarne, 1s.; 10 Frank Mills, £4; 50 Frontino and Bolivia, 8s.; 5 Great Laxey, £2 1/2; 20 Great North Laxey, £2; 5 Great Vor, £1 1/2; 25 Lady Bertha, 3s. 9d.; 20 Mineral Rights, 1s.; 10 Marke Valley, £2 1/2; 20 North Treskerby, £2 1/2; 20 New Wheal Lovell; 20 New Trelawny, 1s. 6d.; 20 Prince of Wales, 2s. 6d.; 200 Rossa Grande, 3s. 6d.; 40 Rosewarne United, 1s.; 5 St. Ives Consols, £4 1/2; 5 West Caradon, £4 1/2; 100 West Kitty.

M R. LELEAN BUYS AND SELLS ENGLISH AND FOREIGN STOCKS AND SHARES, and advises parties who consult him for profitable and safe investments.

Bankers: Robarts, Lubbock, and Co., Lombard-street.

11, Royal Exchange, London, E.C.

M R. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for August should be consulted by all who wish to review the state of the markets for the preceding month; and to find a description of the most eligible investments returning 10 per cent. and upwards. Single copies, 6d. each; annual subscription, 5s. Published monthly, and sold by Messrs. Pottle and Son, Nos. 14 and 15, Royal Exchange, London, E.C.

G EORGE RICE, SHAREDEALER, 5, COWPER'S COURT, BIRCHIN LANE, LONDON (23 years' experience), Member of the Mining Exchange, DEALS largely in MINING SHARES, either as BUYER or SELLER, at closest market prices.

GEORGE RICE will BUY, at the highest market prices, for cash down, SHARES in the FOLLOWING MINES :

Chiverton Moor.	East Caradon.	Prince of Wales.
Chiverton.	East Lovell.	St. John del Rey (Gold)
Chontales (Gold).	Frontino (Gold).	Wheat Grenville.
Clifford Amalgamated.	Great Wheal Vor.	West Chiverton.
East Grenville.	Marke Valley.	Wheat Crebtor.
East Carn Brea.	North Treskerby.	Washoe Gold.

Aug. 17, 1866.

Money lent on mining shares.

Bankers: Bank of England.

G REAT WHEAL VOR.—GEORGE RICE, 5, COWPER'S COURT, BIRCHIN LANE, LONDON, is a BUYER, for cash down, of any part of 100 shares in this mine, and will give the highest market price. Sellers will please state number of shares.

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G EORGE RICE, of 5, COWPER'S COURT, CORNHILL, LONDON, can now state that there are in the market about a dozen mines, the shares in which are selling at a few shillings per share, which must rise in price pounds per share before the close of 1866. Apply to him at once.

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Valuable information relative to the merits of the following mines will be forwarded on application:-

Great Laxey. Central Snailbeach. Rosewarne Consols. 48. Threadneedle-street, London, E.C., Aug. 17, 1866.

East Grenville. Great So. Chiverton. East Chiverton.

North Jane. North Treskerby. Prince of Wales.

SPECIAL BUSINESS, either as BUYERS or SELLERS, in all kinds of mining shares, at nett prices.

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M R. J. W. HUTCHINSON, 78, OLD BROAD STREET, and MINING EXCHANGE, LONDON, E.C. tenders his services to the public in the sale or purchase of mining and other securities, at close nett prices. A selected list on application. Bankers: City Bank.

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Messrs. Wilson, Ward, and Co. are DEALERS in the FOLLOWING SHARES, at market prices: Frontino and Bolivia Gold, Great Laxey, Caldbeck Fells, Pendine and Lomax, New Wheal Towan, and North Treskerby. Can recommend two good mines for investment. Their fortnightly Circular may be had on application.

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M R. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, E.C. has BUSINESS to TRANSACT in all the LEADING MINES in DEVON and CORNWALL.

PRINCE OF WALES.—I called attention to this mine when at 4s. per share, now 2s., 2s. 6d. The market went a little flatter on Wednesday, owing to the lode making a splice, but it has been found since that the lode is further to the north. A hole has been blasted, and splendid ore taken away, and no wall yet. I believe it to be a great prize, and should not be surprised to see the shares at a very high price.

WANTED TO BUY any part of 2000 Prince of Wales, at a shade above the market price; 50 Great Vor, 100 Clifford, 300 North Treskerby, 200 Caldbeck Fells, 5 Wheal Seton, 50 Tincroft, 50 East Caradon, 100 West Wheal Kitty.

Money advanced on marketable mining shares.

Office hours, Ten till Four.

Bankers: Bank of England, and Consolidated.

S HAREHOLDERS IN PUBLIC COMPANIES desirous of avoiding calls and further responsibility will find purchasers on applying to Messrs. BARRETT AND CO., 75, OLD BROAD STREET, CITY, and No. 9, SPRING GARDENS, CHARING CROSS. Stocks, shares, &c., bought and sold. Investment Review on application. Cash advances made.

M R. WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, continues to deal, at close market prices, in all good sound DIVIDEND and PROGRESSIVE MINES, either for cash or the account.

M R. GEORGE BUDGE, NO. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 18 years), has FOR SALE at nett prices:—50 Quebrada (fully paid), £2; 10 East Lovell, £5 1/2; 100 Great Retallack, 1s. 6d.; 2 Minera, £2 1/2; 2 Devon Great Consols, £3 1/2; 100 West Wheal Kitty; 50 Anglo-Brazilian, 7s.; 10 West Caradon, £4; 80 Prince of Wales, 2s. 9d.; 5 Great Laxey; 1 Wheal Seton, £1 2s.; 150 Mineral Rights; 75 Okel Tor, 7s.; 100 Hollybush Coal, £2; 150 Caldbeck Fells, 2s. 6d.; 50 South Callington, 2s. 6d.; 100 Don Pedro, 1s. 6d.; 1 West Sharp Tor, £2 1/2; 5 Tincroft; 100 Bottle Hill, 1s. 9d.; 10 St. Ives Wheal Allen; 10 Prosper United, 1s.; 5 West Great Work, 1s.; 50 North Downs, 2s. 6d.; 50 Great North Downs, 5s.; 40 East Rosewarne, 1s.; 200 Port Phillip; 50 Cudra, 8s.; 5 Wheal Trelawny; 5 East Darton; 100 East Seton, 7s. 6d.; 50 Redmoor, 2s.; 40 Camborne Vean, 1s.; 80 Great Caradon, 1s.

P RINCE OF WALES MINE.—MR. PETER WATSON visited this mine on Wednesday, the 15th inst., in company with one of the most experienced mine managers in the county of Cornwall, and who well knows the district. Copies of this inspector's report may be had on application to Mr. WATSON, at 10s. 6d. each. Further particulars will be given in Mr. WATSON's "Weekly Mining Circular" of Friday, the 24th inst. Price, 6d. each copy.—79, Old Broad-street, London, E.C.

T HE LONDON DAILY RECORD, STOCK AND SHARE LIST.—I beg to call particular attention to the fact that nearly all the afternoon or evening London newspapers contain the prices of stocks and shares up to about One o'clock only (on same day as published), instead of Four to Five o'clock. The difficulties which shareholders and the investing public have thus encountered in seeking for correct and latest daily prices have induced me, at the suggestion of several of my friends and customers, to publish every evening "The London Daily Record, Stock and Share List," which will be ready at about Half-past Five o'clock, and delivered to subscribers in and around London the same evening. It will also be posted in time for the same evening's mail to country subscribers, who will thus be enabled to get the latest prices some eight or ten hours earlier than they at present have the means of doing. The importance of this at the present anxious moment must be obvious to all, as during the next few months the daily fluctuations in prices of railway stocks, banks, financial, and other shares will be very great.

It will be my constant endeavour to convey the best and most reliable information (derived from authentic sources), and in giving the latest actual marketable prices of buyers and sellers. Every person, therefore, interested in stocks and shares will find it to their interest to subscribe to "The London Daily Record, Stock and Share List." Those who desire to have it sent to them regularly every evening will please at once apply to PETER WATSON, 79, Old Broad-street, London, E.C.

T HE LONDON DAILY RECORD, STOCK AND SHARE LIST.—Sent out by every evening mail to country subscribers, and in time for the same evening's delivery in and around London. Gives the latest correct closing prices of stocks and shares, &c., of the day.

Annual subscription	£1 1 0
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PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

P RINCE OF WALES MINE.—MR. PETER WATSON is a BUYER or SELLER of these shares, for cash or time on, and is in a position to give advice as to buying or selling at present prices.

79, Old Broad-street, London, E.C.

M R. EDWARD COOKE, STOCK AND SHAREDEALER, 2, CROWN COURT, THREADNEEDLE STREET, E.C.

Frank Mills, East Lovell, Chontales, Mineral Rights, and Tresavean Fells should be bought, as there is every probability of a great rise in the course of the coming two or three months. The present price is so ridiculously low that there is a large margin for profit.

Satisfactory references given in any town in the United Kingdom.

Bankers: Alliance Bank, Lothbury.

M R. C. A. POWELL, SHAREDEALER, 78, OLD BROAD STREET AND MINING EXCHANGE, LONDON, E.C.

Mr. POWELL TRANSACTS BUSINESS at net prices as BUYER or SELLER of SHARES in all the leading DIVIDEND and PROGRESSIVE MINES for cash or the fortnightly account, and can recommend for investment several mines, the shares in which will, in all probability, considerably advance in market value during the coming months.

Aug. 17, 1866.

Bankers: Bank of England.

M R. G. D. SANDY, STOCK AND SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS in EVERY DESCRIPTION of STOCK EXCHANGE SECURITIES, MINING and FINANCIAL ENTERPRISES, at close market prices.

DAILY PRICE LIST may be had on application.

Money advanced to any amount on legitimate stocks and shares.

References exchanged.

M R. G. D. SANDY'S INVESTMENT CIRCULAR should be consulted by all interested in any description of marketable securities; those who have received it in regular course will best appreciate value of same.

Circular for this month now ready, gratis, post free.

48, Threadneedle-street, London, E.C., Aug. 17, 1866.

M ESSRS. MCNEILL AND LONG, STOCK, SHARE, AND MINING DEALERS, 7, POPE'S HEAD ALLEY, LOMBARD STREET, E.C.

Bankers: Alliance Bank.

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Bankers: London and Westminster, Lothbury.

M R. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 12 years), has FOR SALE the FOLLOWING SHARES, at nett prices:

50 Prince of Wales, 2s. 6d.; 50 West Kitty, 12s.; 40 Chontales, 8s. dim.; 50 Min. Rights, 2s. 6d.; 50 St. West Seton, £1 1/2; 10 West Caradon, £2 1/2; 20 Cook's Kitchen, £2 1/2; 40 East Grenville, 4s.; 15 Clifford, £7 12s. 6d.; 30 Rosewarne, 1s.; 20 Wheal Consols, 7s. 3d.; 20 Frank Mills, £1 1/2; 50 So. Conduru, 1s.; 50 Cald. Fells, 2s. 6d.; 25 Kingston, £2 1/2; 50 So. Condua, 1s.; 50 Wheal Valley, £2 1/2; 50 Lady Bertha, 9d.; 50 Wh. Grenville, 1s.; 40 East Rosewarne, 1s.; 60 Wheal Rose, 1s.; 20 Whe. Chiverton, £2 1/2; 50 Marke Valley, £2 1/2; 50 St. Ives, 1s.; 50 Wheal Seton, £1 1/2; 10 Mary Ann, £1 1/2; 50 Bullock, £2 1/2; 50 East Caradon, £6 8 9; 50 Great Vor, £1 1/2; 60 East Lovell, £5 6s. 3d.; 55 Chiv. Moor, £2 1s. 3d.; 10 Great Fortune, 5s 3d.; 10 Whe. Margaret, £1 20s; 20 East Russell, £2 6s 3d; 5 St. Ives, £2 1/2; 20 Craddock Moor, £1 1/2; 30 Camb. Vean, 1s.; 50 Copper Hill, £1 1/2; 50 Central Minera, 1s.; 50 Toccarne, 4s. 6d.; 5 Wheal Rose, £1.

1 Devon Consols, £2 35s.

55 Wheal Seton, £2 1s. 3d.

10 Great Fortune, 5s 3d.

10 Whe. Margaret, £1 20s.

20 East Russell, £2 6s 3d.

5 St. Ives, £2 1/2.

20 Craddock Moor, £1 1/2.

50 Copper Hill, £1 1/2.

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AUG. 18, 1866.

Original Correspondence.

PROPOSED REMEDY FOR THE PRESENT DEPRESSION IN THE PRICE OF ORES.

SIR,—I have read with great interest Mr. John Taylor's two letters, the one dated July 12, and the other August 10, on the subject above referred to; and at first sight his suggestions would appear to be reasonable—that is, by diminishing the supply of British ores to the smelters, a better price would be obtained; but there are so many elements at work all over the globe, and so many new foreign mines being discovered and prosecuted that unless you get the proprietors of them to reduce quantities also, your endeavours will be fruitless. I have had opportunities of watching the progress of foreign mines, and the importations of their produce, for upwards of 30 years, and have witnessed the various changes introduced by Parliament for the protection of our British mines; but the productions of the earth seem to have baffled all our schemes and legislative enactments.

Before 1842 there was a sliding scale of duties charged on foreign ores, for the protection of our mines. I believe the first scale was 3s. per ton upon all copper produce of ores under 20 per cent.; 4s. 10d. per ton on those of 20 per cent.; and 6s. per ton on all above 20 per cent.; the result was that the Chilians and others sent large quantities into Germany to be smelted, and the copper so produced came at once into the various markets to compete with our own. Another experiment was tried, that of allowing the ores to be reduced here, and the produce thereof exported under the Custom House authorities, to some foreign market; this worked with the same result as the sliding scale. Then, again, in 1844, there was another bill passed, allowing all ores to come in free of duty; and I well recollect about that time having a conversation with the late Mr. John Williams, of Barncoose, when he asked my opinion upon the bill then before Parliament, for taking away all restrictive duties upon foreign ores: my answer was, seeing that all other means had failed to prevent foreign copper being brought into direct competition with our own, it would be better that the whole should be reduced in England, when we could retain the freightage, the advantages and profits of smelting, and also hold the control of the sales of copper all over the world; and this has proved pretty much the case.

I fear that Mr. Taylor's remedy, that of diminishing the raisings of British ores to any small extent, will not result in enhancing the price of that article, especially whilst the foreign mines are so prolific; but get the foreign miners to reduce their raisings in the same ratio as the British, and then you will do some good to both. Without this combination I see but little chance for the Cornish miners, for by reducing your raisings you must necessarily reduce your hands also, and those miners will emigrate, and go to those parts of the world where their labour, as miners, will be more particularly required, and where, through their penetrating and skilful judgment of mining matters, fresh discoveries will be made, and thus add to the present difficulties of the Cornish mines. It is of little advantage to the smelters in those times to have more copper thrust upon them than what is actually wanted by their customers. In conclusion, looking at the difficulties of arrangement for curtailing importations of foreign ores, I fear that many of our Cornish mines must succumb, and give place to those more productive foreign mines at present in operation, and those which may yet be discovered.

Northampton-place, Swansea, Aug. 15. THOMAS BOUNDY.

THE SLATE TRADE IN THE UNITED STATES.

SIR.—The people of this country are greatly indebted to the *Mining Journal* as the medium of an increasing correspondence on the successes of late years in oil and mineral discoveries in America, much of which are highly interesting. I would also, by your permission, mention that the growing commodity, slate, has been discovered in greatest quantities in the United States of America during the past 16 years, although long before the year 1850 slate had been quarried from a few beds protruding at surface in different parts of the country, yet operations were not attempted on a large scale until practical quarrymen from England and Wales had inspected these beds, and decided upon the value of the deposit, and even then Americans were slow to undertake an expenditure upon this novel (to the Americans) enterprise. These foreigners, having secured grants for a term of years, commenced with limited means to excavate and prove the supposed value of their prize. The quality of the slate soon rendered it the chief article in demand, and brought the proprietors handsome fortunes as a reward for their enterprising efforts. This new feature in the road to wealth establishes the fact that outlay in the right direction is invariably attended with certain recompense. These acquisitions of wealth begot in the Americans a desire to act (according to established rules) in co-operative bodies to extend the quarries already commenced. In order to do this, the original holder of the grant had to be bought out, or his interest incorporated in a way to afford satisfaction to himself and in-coming parties; it having been sufficiently demonstrated that when capital and art are brought to bear upon the manufacture of slate upon an extensive scale from the beds and veins already known to be valuable, the business and returns will continue to increase, *pro rata*, with the labour and funds subscribed.

Slate from the State of Pennsylvania has hitherto been of good colour, smooth cleavage, and of an exquisitely interwoven texture, the division of the grain is easily wrought, and its endurance of weather unquestionable. The quarry known as Chapman's Quarry, in the county of Northampton, near Bath, takes the lead, both in point of value and of profits; the strength and durability of these slates are held in such repute, that although the make of slates is yearly increasing the demand is far in excess of the supply. The slate deposit on this property will continue to yield for ages tenfold the present manufacture when more fully developed. The profits of this quarry have already given the proprietor a princely fortune. A new railway (now being made) passes through this property, opening up shipping advantages at a small cost to the cities of New York, Philadelphia, and other large towns rising up in the West. The second quarry in point of value (about 12 miles north-west of the above), recently purchased by the Pennsylvania Slate Company, was discovered about 12 years ago by two Englishmen, who had served an apprenticeship in the various branches of labour appertaining to the slate business. This valuable range of slate-rock, with sufficient working capital, cannot fail to give permanent and unusually large dividends. The inclination of the different beds, with other natural and important features, are only understood by thoroughly practical slate quarry engineers, and demand that special inspection and competent superintendence should be allowed unfettered control in the general direction and management.

Experience has painfully proved that when capital is entrusted to the disposition of men professing an acquaintance with labour with which they have no practical knowledge, even the best channels for investment have greatly depreciated in value, and in many cases been abandoned, before any return could be shown to meet the improvident and unsparring use of the invested capital. In this country the demand for slate is far beyond the supply; orders, as a rule, stand on the books 20 months ere they can be executed. Already the same state of things is becoming felt in America, and will continue to be more felt when the great mass of people become enlightened upon the many advantages arising out of this class of roofing material. The all but incredible returns dug from some of our Welsh quarries is becoming known to our transatlantic neighbours, and when they are aware that the profits from some of our quarries average from 40,000*l.* to 150,000*l.* per annum; and they, having the same class of deposit in great quantities, would, of course, be an indolent and unwise people not to unite capital with labour in order to obtain the like results. One great advantage with reference to the Pennsylvania Slate Quarry is that the beds of slate-rock can be wrought upon with little plant, and the top waste (which is light) can be removed without any machinery whatever; 1000*t.*, or \$5000, would furnish means to supply the bank with convertible slate-rock sufficient to yield 150 squares per day, &c., in proportion. The labour of 300 men might be distributed to advantage on this property in two years. Proper management in three months would prepare for market 100 squares per day, taking the quarry as it stood when the Pennsylvania

Slate Company took possession. Hereafter I shall give particulars on some other quarries in this and other Northern States.

Nantlle, North Wales, Aug. 14.

JOSEPH KELLOW.

THE PATENT LAWS, AND THE PUBLIC.

SIR,—Although I am well aware of the danger to which "they who in quarrels interpose" are subject, yet my predilections in favour of the rights of inventors to a property in their inventions are so strong, that I find I cannot avoid stepping into the arena of the "triangular duel" now proceeding between Mr. Henry, "Colliery Engineer," and Mr. Mushet; and I have the stronger inclination to intervene in that contest since "Colliery Engineer's" letter, in your last, has put the anti-patent law view of the case in such an astute manner, that it requires to be met with all the power of argumentation that can possibly be brought to bear on the question.

The kind of logic that "Colliery Engineer" adopts renders it a very difficult thing to deal with his arguments in a serious manner; one is at a loss to understand whether he wishes to be funny or forcible—to excite our risible faculties, or firmly establish a sound position. The leading idea pervading "Colliery Engineer's" objections to the Patent Law (as I understand him, to *any* law establishing a special property in new inventions), is that in practice the true or original inventor does not get the reward, but that the prize is always snatched away from his grasp by the cunning plagiarist. But this is really an objection to the great principle of the Patent Law—namely, that any inventor shall thereby be afforded a fair chance of obtaining remuneration for his thought, labour, and skill in bringing forward a new improvement in our arts and manufactures beneficial to the public at large? It is surely no objection to the principle of the law, but is simply a proposition that in the present state of the law all that it professes to do is not effected by it. I affirm it is no argument in behalf of abrogating the Patent Laws; it is an argument (and a strong one too) for amending those laws, in the interests of true inventors, provided always, as we lawyers say, it is really a fact that true inventors are as hardly used as "Colliery Engineer" asserts.

To put puzzling questions is not difficult. Pilate said, "What is truth?" "Colliery Engineer," following his example, says, "What is an original invention?" Put in the way "Colliery Engineer" puts it, the question is one little likely to cause the suicide of the Spynx. He might, in the same spirit, ask, "What is electricity?" and expect an answer equally satisfactory in all points of view. But if we allow that an original invention is to be taken to mean an invention the origin of which cannot be traced to anything antecedent to itself, then, I suppose, at this period of the world's history, we cannot expect to find any original inventions at all, because it is scarcely possible to devise anything which has not some amount of resemblance in principle to something already practised in some branch of the arts and manufactures. Criticising the merit of discoveries in this narrow way would make Watt's great invention little better than an advantageous plagiarism, for it might be said that the system of condensing the steam in a vessel separate and distinct from the working cylinder was, in effect and operation, the same thing as the separate condensation vessel of the common still, and, consequently, that the whole matter might be summed up as being simply the application of what existed in the common still to the steam-engine. In fact, this way of looking at the matter would, if followed through all matters connected with the practical arts, lead us to deny that a manufacturer was the maker of an article every component part (*per se*) of which he did not produce from the raw material; in fact, it is just the principle upon which the bellows-blower proceeded when he congratulated the organist upon the admirable performance of music they had jointly effected upon their organ.

I fear that if "Colliery Engineer" fairly expresses his views on the subject of property in inventions, that although an adept in logic has never studied rational jurisprudence, to say nothing of the positive law on patents, otherwise he would not make so much of this notion that the advantage or disadvantage of the patent law system must be measured by its adequacy or inadequacy as a system of bestowing prizes for superiority of merit or attainments in regard to matters of practical science. For if he had duly regarded the subject as one of public law, he would have seen in a moment that no law which restrains, interferes with, or immediately affects commerce and manufactures can be sound, when it simply affords advantages to a number of private individuals, however talented or meritorious they may be. The great maxim of jurisprudence (certainly the maxim of the present day) is *Salus populi suprema lex*—hence it is the advantage to the general public which must be regarded in the consideration of legal questions, and, by consequence, the Patent Law must be looked at as a measure for forwarding in a practical manner the practical progress of the industrial arts, thus helping us to maintain and improve our position in a commercial and manufacturing point of view. To prove that the Patent Laws (even in their now defective condition) do forward such arts, I would at present refer "Colliery Engineer" to Mr. Henry's admirable little pamphlet.—4, Middle Temple-lane, Aug. 13. F. W. CAMPIN.

PETROLEUM AS STEAM-FUEL.

SIR.—A great deal has been written in the *Mining Journal* in connection with the proposition for burning petroleum as a substitute for coal in the generation of steam, but I have not observed that anyone has attempted to show that the fluid fuel would have any material advantage over coal, even assuming the practicability of burning petroleum to be proved. It has always been considered that the heating power of petroleum was one and a half times that of coal, weight for weight, and Mr. Richardson has proved, by an elaborate series of experiments, that although this statement places petroleum in a rather more favourable position than it is entitled to, the estimate is sufficiently accurate for practical purposes. As to the bulk required respectively for the stowage of coal and of petroleum, I should think that 2 tons of petroleum could be carried in as small a space as 3 tons of coal, so that for bulkiness the two kinds of fuel would occupy the same space for the quantity necessary to raise given quantity of steam; but then there arises the important question whether the loss by evaporation of petroleum, or, indeed, of any liquid fuel, even though as non-volatile as water, would not be greater than the deterioration of coal.

With regard to the introduction of liquid fuel, and especially petroleum, I conceive it would be at all times extremely inconvenient, if not altogether impracticable, from the great cost attending its transport. I am aware that Mr. Richardson proposes to stow it in what he considers waste portions of the ships using it, but before accepting this proposition several things must be considered. In the first place, the attempt to carry the petroleum, or its equivalent (for, of course, Mr. Richardson would employ coal oil, &c., when more conveniently obtained), otherwise than in sound and well closed barrels would practically limit the supply of the ship to a single filling of the bunkers for replenishing, except at the place of production, with oil would be out of the question; and it is especially in this that liquid fuel would ever be at a great disadvantage. It is simple enough to store 10,000 tons of coal in each of 50 depots in as many parts of the globe, and the cost of that coal would only be that at the place of production, plus the cost of carriage, because the coal once at its destination all further expenses attending it would cease. Not so, however, with petroleum; the cost would be not only the price at the place of production, plus the cost of carriage, but there would also have to be added the price of the barrels to contain it, and the expense of keeping those barrels in repair. It would, consequently, be disadvantageous to employ liquid fuel, even if it could be obtained at the place of production at only twice (much less ten times) the price of coal. In this estimate I have not considered the question of deterioration, although 10*t.* of petroleum or coal oil would at the end of a couple of years have lost much more than 50*t.* worth of coal would have lost in the same time; for the present, however, it will suffice to consider the deterioration of the two kinds of fuel equal.

The greatest credit is undoubtedly due to Mr. Richardson for the energy he has displayed in the attempt to introduce petroleum as steam-fuel, but, unfortunately, the facts are against him, and these facts he cannot alter. It requires 2 tons of petroleum to do the same amount of work as 3 tons of coal, but these 2 tons of petroleum cost

as much, and are far more difficult to carry, than 30 tons of coal, and this is a fact which applies equally in every part of the world. Of course, I may predict inaccurately, but it is my confident opinion that so long as coal is obtainable for less than 5*p*. per ton at the pit's mouth liquid fuel cannot compete with it, and if Mr. Richardson had been connected with the engineering profession he would have satisfied himself of this fact long since—certainly, so soon as he had obtained the conclusive results which he has published in the *Mining Journal*, and which prove beyond question the enormous loss that would result from the attempt to substitute any liqued fuel for coal. For marine purposes a return to the old system of sailing-ships would be more practicable than the introduction of any liquid fuel, unless it be—
Woolwich, Aug. 13.

SALT WATER.

THE DYFNGWM MINES, AND THEIR MANAGEMENT.

SIR,—Although I stated in my last letter to you that "my hands were tied," having been refused permission by my superiors to reply to "Ex Officio" and other communications, yet, in the face of that announcement, last week's *Journal* contains an attack upon myself, so utterly devoid of truth, and so reckless, that I feel impelled in self-justification to give it the most complete contradiction; and, further, as the Dyfngwm Company are going to make new arrangements for the efficient working of the mines, I lose no time in replying to the statement of "Ex Officio." By so doing, however, I shall probably forfeit the esteem of those shareholders who have behaved so honourably and gentlemanly throughout the fifteen years I have had the honour of serving under them. One object, probably, your correspondent had in view when he shaped his last attack upon me was to bring about this result. Be it so. His revenge shall be gratified; and, rather than tamely submit under the imputations so untruthfully cast upon me, I will at once sever my connection with the Dyfngwm Mines. Your correspondent reckons without his host if he thought he should make such an attack upon me with impunity. He has forfeited all claims to deference on my part, as from an officer to his employer. Let him be whatever he is, and let me be whatever I am, "a man's a man for a' that." Human nature is being outraged by the wretched conduct of "Ex Officio." If I do not succeed in vindicating myself to the satisfaction of my numerous friends, and your more numerous readers, I must hide my diminished head in disgrace. This question, however, concerns the managers and agents of mines generally. Has it come to this, that our characters are to be made the shuttlecocks of discontented and disappointed share-holders? I think not.

One remainder of good only is there to be seen in "Ex Officio's" letter. He is ashamed to attach his name to it. So he ought to be, and so ought every man to be ashamed to acknowledge such dirty work. He opens his communication by asserting he is no "enemy of Mr. Davies." That assertion is made in the spirit of his whole letter. Unfortunately, he is a YOUNG and old enemy of mine; he knows it well enough, and there are others who know it quite as well. Fifteen years ago these mines were in a bad state, and I was requested to assume the management (being then the manager of another mine, and also a much larger farmer than I am at present). As there had been some years previous to that an unpleasantness between myself and "Ex Officio," before accepting the office I wished to satisfy myself that he would not interfere with me. I was assured he would not, and under that impression I undertook the management, not giving up any of my other avocations. I worked hard for the interests of the company, eventually placing the mine in the Dividend List, even with a small and inadequate capital, thus justifying and proving the correctness of those reports made years before, that Dyfngwm would make a good mine in depth. I will do "Ex Officio" the justice of admitting that from that time to within the last two years he did not interfere with me. Since then the old feeling has burst out with increased vigour. I am sorry to see that digression, but it is absolutely necessary to enable your readers to understand the sequel.

Let me now notice "Ex Officio's" charges: they are put to me in the shape of questions. The first is—"That the company improvidently made a pool of water on an adjoining property to work their wheel, at a cost of 80*l.* to 100*l.* to be forthwith taken from us." Edward Davies begs to inform the Editor of the *Mining Journal*, in the most unqualified manner, that the statement is *totally untrue*. The "making of the pool" cost us just one-third of what "Ex Officio" states, or 27*l.* So that it was not "forthwith" nor never, taken from us—in fact, there was no power on earth that could have taken it from us. It was given up under negotiation to a mining company, at the head of which was Mr. John Taylor. The latter gentleman's name is a sufficient guarantee there was something in the transaction other than taking away. In another form "Ex Officio" has taunted us with "that the water from our own pool is offered on payment of 100*l.* a year for it." This is as untrue and as nonsensical as the other. The water from our old pool we have had the use of free during the last eighteen months, whenever we have sent up to ask for it. The water for which 100*l.* a year rent is paid is the Glaslyn Lake, two miles away. How your correspondent confounds one thing with the other!

Another charge is "that the steam drawing engine was in a most filthy condition." That shows there was some work going on. This engine works incessantly from 6 o'clock on Monday morning until 12 o'clock at noon on Saturday, night as well as day. Your readers who understand such matters will not expect to find the parts clean and bright, when I inform them it is a high-pressure, going from 50 to 120 strokes per minute, and that the engineers are constantly attending to the lever, the break, and the signal of the drawing machine.

Another charge is "that the underground captain was dismissed for quarrelling and drunken conduct." My reply to this, again, is that it is completely untrue. Our late captain was not dismissed for the reasons assigned. He was not dismissed at all. He simply resigned his situation, and those who make these reckless charges against him may abide the consequences. Whenever he calls me to the witness-box I can refute them. "Ex Officio" has confederates down here who are in correspondence with him, and on the faith of which he has made these charges against the late captain to the shareholders in London. These same correspondents, I fear, were at the bottom of the disobeidence; they first disobeyed, and then possibly made the charge; I know of one who has done that to me. I also received anonymous letters, and after just testing them handed them over to the captain: I found them to be falsehoods. Nothing can be worse conduct towards this poor man (who I hear is pushing his way on a railway), than to brand him publicly with infamy in this manner, of which he was not guilty. He did his best for his employers, and when he found, from causes over which he had no control, that he could not further serve them as he wished, he resigned his situation. Mr. Editor, how the wind has veered in late years! Formerly, charges were made against me that I was too strict a teetotaler—that I would employ none but teetotalers, &c. Now there is a wharf-about, and I am charged with retaining a drunken captain! That is as capital a joke as has been lately perpetrated. Edward Davies, of Dolcaradog, take sides with drunkenness! What next? Notice how unskillfully "Ex Officio" puts it. If the person he alludes to had been guilty of the charge, the manager would only have done his duty in discharging him. There was, however, neither the one thing nor the other.

The next charge is "that a house built by and belonging to the company for the accommodation of the manager was untenanted, while the manager himself, being a farmer, lived five miles off." The first part of this charge, again, is of the same character as the body of the letter. The house was not built for the accommodation of the manager, nor was it built by the company for any one's accommodation. This house was built years before the company became possessed of the mine, and built for the use of the then resident agent. The then manager, who was also the manager of several other distant mines, resided some 60 or 70 miles off, and, like the present manager of Dyfngwm, was himself a farmer. My engagement with the Dyfngwm Company was that I was to have a resident underground agent on the mine. They have stuck to that part of their bargain, and I have stuck to mine. It is not usual for the managers to reside on the mines in Wales. There are several mines in this locality, and I reside nearer to the Dyfngwm Mine than any manager of the other mines, and go there several times for every once they go. The managers of the great Lliffe Mines reside 60 and 150 miles off, and no complaints made of them. Wherever I reside, I have devoted more of my time to the Dyfngwm Mines than I stipulated for. I am very importantly "an Farmer, and not a Miner?" As to my being a farmer I must plead guilty to the soft impeachment. I am a farmer; and, mind you, I am a miner. I am a freeloader in the county of Montgomery. I reside on my own farm, having built me a house there. My crops look splendid this year. I have already reaped my Llammas wheat, and cut my Canadian corn. I have taken some of the best prizes at an agricultural show, and I am this year going to compete with all England for the best mangolds and Swedes, having had the seeds from Sutton, of Reading. I have a wife, a Montgomeryshire farmer's daughter, and I have eight children. For all which blessings I am truly thankful; but for "a' that and a' that" I am a miner in every sense of the word. Born and bred in one of the first mining districts in the kingdom, at 15 years of age I began mining practically in the mines. I am now nearly 46, so that I have had 30 years' experience in mining in all its branches. At 15 a bucklering boy, at 45 a British yeoman, and at the head of an important mining concern, having gone through all the grades from the boy up to the manager. Oh, what gall this is to some envious people! My farming transactions amount to a few hundred a year. My mining transactions in late years amounted from 800*l.* to 10,000*l.* a year. If, Mr. Editor, you wish to call upon me on any business, ask my neighbours, and they will tell you that, as a general rule, you must call before 8 o'clock in the morning or after 6 o'clock at night. The gist of this is that professionally I am a miner, and the farming part of my business is my home, the business of my wife, and my relaxation. If any other farming particulars are required of me, enquiries must be made at Somerset House, as I have just sent off the printed return to Government. Am I the only miner in the three kingdoms following and attached to agricultural pursuits? No; and be joyful the day when I retire from mining, with all its cares and anxieties, and contumacious "Ex Officio's," and finish my days in peace amidst the calm white-faced features of my Herefords, and the harmless gambols of my sheep and lambs.

Another charge brought against me is, "that the clerk or overseer lives at Llanidloes." My reply to this, again, is that there is not one particle of truth in the assertion. He does not live at Llanidloes; never has resided in the town or parish of that name, nor anywhere nearer to that town than Dyfngwm Mine, 10 miles distant. "Ex Officio" has correspondents in that little busy town. He has sent some of his printed pamphlets there; let him enquire, and he will find the assertion is pure invention. He has been egregiously "sold," and I can inform you that the clerk resides in the exact locality he resided when I first engaged him. Another charge is, "that the present underground agent, or captain, resides five miles off;" but I say he lives on the mine, in the centre, and his three sons with him. His wife, who lives a few miles off, is preparing to join her husband in Dyfngwm. And here is another charge again, "Does Mr. Davies mean to say that the flat-rods in the adit level have not been lifted out of the rubble, and are not now replaced with wire-rope?" Indeed, Mr. Editor, Mr. Davies does mean it. It is true the round rods have been raised above the water and rubble,

character of a fisherman. It is lead ore *versus* fish, and lead ore carries the day. Of course, where 50 to 100 tons a day of sludgy stuff is treated on the floors, and the crushing-mill kept going, the river, especially in dry summer weather, will be muddy. You may as well expect a corn mill to be free of dust as to expect a river running through a lead mine to be free of lead and mud. There is, however, no unnecessary waste. If "Ex Officio" and his confabs can make any profit of what is in the river they are welcome to try, and I will make way, and retire for that purpose. If I were to admit there were 2 tons of lead in the river, but I do not admit there is 2 cwt., 20s. worth of it cannot be got out and dressed, except at a cost of 30s.

With regard to the timber broken down in the 70 fm. level west, we have ceased working there for years, and "Ex Officio" ought to know that. The lode is taken away in one place 20 feet wide, and a stope has fallen in there. Does "Ex Officio" call that mismanagement? Of course, he does. As if stoles falling in are not of frequent occurrence. It will not do to draw the stuff to surface. As soon as some stopes are quite clear of their ore in the 82 west the fallen stuff in the 70 will be thrown down into it, thus answering two purposes.

"Ex Officio's" last taunt is that "Mr. Davies will say now that the reports of Capts. Ridge and Ball are not true." No; Mr. Davies will do no such thing. They are reports as fair and as honest as it was possible for any two men to draw up. They are reports in every way encouraging to every shareholder who wishes to be informed as to the true state of his property. There are some creatures, called bees, who can suck honey out of everything they touch. There are some insects, called flies, that will blow and make maggots everything they alight upon. So it is with "Ex Officio," in the face of these reports. He has got nothing but pure poison out of them, and either does not understand them or wilfully misrepresents them. And Capts. Ball and Ridge were principally selected by the manager, &c. Were they? No; it was decided not. I was at the meeting where it was decided upon having an Inspector. The meeting, in a very friendly way, was divided—one party for this, the other party for the other. For the purpose of bringing about unanimity, I took the liberty of suggesting that they had better appoint two, so that all parties might receive recognition which they could confide. The suggestion was acted upon. Does that look like being selected by the manager? Do not let "Ex Officio" lay the flattering unctuousness of his soul" that the charge with regard to the traction-engine is unanswered because not noticed in its proper turn. I come to that part of his letter now. Here it is. "Does Mr. Davies mean to say * * that the engine-house was taken down and rebuilt elsewhere, not hind side before?" Mr. Editor, is the latter sentence the Queen's English? It certainly is not the Prince of Wales's English. However, this is the only part of "Ex Officio's" letter which I shall confine in every word and letter. It is exactly as he says. I had cut the foundation for this engine-house in the rock, and had erected a wooden shed over it, an oblong square, open at both ends, and that in the most appropriate place on the mine, and where, eventually, it will have to be taken again. Before the traction-engine arrived I had been given to understand that the situation of the building was objected to. I was commanded to take it down and re-erect it where it now stands. And there the traction-engine now stands in all its glory, a splendid monument of the ex-officiness of its father and godfather, "Ex Officio." But it will only cost about £2,000 to put it where it ought to be. Inside this engine, however, Mr. Editor, lies the secret of all this hubbub against the Dyngwym manager, which has been broached about the City of London and the public press for the last 18 months. It is the failure of the traction-engine for carrying

In fairness to "Ex Officio," because I can afford to be fair even to him, the conception of the idea of having a traction-engine for all purposes was a most worthy one—commendable in the extreme. For pumping purposes I have been its greatest, in fact, its only defender, at every meeting of the shareholders; but for traction purposes—why? "It wouldn't go." The engine, it is but fair to add, did travel to the mine and back more than once, and did its work on the road extremely well. That was in fair weather. The wet, however, came, and our roads being in many places a rotten clay-slate, and in others deep mud, the end of it was—"It wouldn't go." No one regretted this more than myself. And ever since that time "Ex Officio," instead of "wallowing" the engine, has turned to wallowing the manager—hoping, by that means, to divert the attention of the shareholders from himself and this matter to other things. "Ex Officio" has absented himself from all the meetings ever since, and in an underhand way, by all the means in his power, attacked your humble servant. After this explanation, which I am sorry to trouble your readers to peruse, I am sure you and them will not be surprised that the shareholders have not acted on his communications, not even allowing them to be discussed at their meetings. They have acted like English gentlemen; and if by this act of mine I forfeit their esteem and confidence, I have only to say that my character is of more value to me than their mine is to them. "Ex Officio's" epistle has been distributed extensively in the district—with what effect, heaven only knows.

"Ex Officio" concludes with referring to "Mining rather under difficulties." Is he that of mining difficulties? The difficulties of this mine during the last two years I attribute to him. He was a leading member of the finance committee, and as such ought to have attended the meetings, as it was expected he would, and found the finances to carry on the operations at the mine instead of allowing me to be three months behind with the men's wages. It is well for him and his mine that the manager was a farmer, the credit of whose position has kept on the mine at several critical periods. There is now a new finance committee, and the members are good working men of business, fast pulling the mine out of all difficulties brought on by "Ex Officio." EDWARD DAVIES. Dolcaradog, Machynlleth, Aug. 15.

CARBON, ALUMINIUM, THE DIAMOND, THE GRANITE, AND THE EARTH'S STRATIFICATIONS.

SIR.—In my last remarks I thought I gave ample room for some of your able correspondents to have brought out some valuable information—something that was useful to the Practical and amusing to the Theoretical. On my return, however, I could find nothing, until someone informed me there were some remarks in your Notices to Correspondents. Turning to them, I found those of "F. G. S." Then I very naturally ask, Who is "F. G. S.?" Now, I think I know with whom I have to deal, and have to tell him what he cannot or will not tell the public. He is merely one of the rotten limbs of his school; one who is well known not to be sound, or his intentions good. Were he so, he would have long since discovered that England's metals and minerals have elevated her above every nation of the world, and on that she is dependent for the future. "F. G. S." is not aware of this; he has neither intellect nor a fertile mind to cope with my remarks. Sir William Elford was generally considered a first-class lawyer; but he was once taunted that he never turned out any but duds from his school. His reply was, that every gentleman who had some deficient of brain sent them to his tutor; but he stated it was no part of his contract to put bairns into their heads—he only agreed to do his best to cultivate the little they had, consequently, having little or no brain to cultivate, they all returned much as they came—very far from shrewd lawyers. If Sir William, a first-class man, could make nothing out of such narrow-minded pupils, what can we expect ordinary school-teachers to do with such as "F. G. S.," who says to me "take a few lessons in chemistry." I admit true chemistry is a useful science; but I have yet to learn where I am to go to be favoured with true lessons on metallic chemistry, as I never yet got a true assay of a single ore I have ever handled to one of them, if I did not first tell them what metal it contained. I venture to tell "F. G. S." that I hold most of their leading men's assays in my hands.

During the past week I was professionally called in to look at a mine in South Wales, where I found only a lode of poor anthracite coal; it was full of streaks and, many of them variegated. A sample was sent to the School, and most likely to this very rotten limb. In his reply he, no doubt from want of chemical knowledge, omitted to return the general contents. He did not even venture to name the anthracite, but said "the colouring was copper that had not yet crystallised, and was only similar to the colouring in the peacock's tail;" I say, without fear of contradiction, that it did not contain a particle of copper; the colouring was only oxide of iron. "F. G. S." had better be more cautious for the future, as I pick up a good many such analyses in my travels, and shall have a long list to publish. I further tell him I am not yet inclined to pay him for what he calls chemical lessons; were I to do so, I should prefer them from Prof. Pepper, who is young, and, most likely, a rising man. In conclusion, I have only to ask "F. G. S." if metallic bars of gold, silver, copper, lead, tin, zinc, iron, or aluminium are oxides? If so, I admit he has opened a new book for me to study—had he stated that clay alumina contains oxide of aluminium, I might have understood him. N. ENOR.

GOLD MINING IN BRAZIL.

SIR.—As it may serve a charitable purpose, I prefer not to ignore—in spite of the language employed—Capt. T. Martin's *distinct contradiction* (made in defence, not of himself but of others). I will put down the sum of 50s., let Capt. Martin put down another 50s., my 50s. to be forfeited if I fail to furnish clear and convincing proofs of the truth of what I stated. Capt. Martin's 50s. to be forfeited if I do not fail so to do. The forfeited amount (50s.) to be dedicated to the relief of distress, by preference of miners. The samples I alluded to were *bona fide* samples, which I took myself; the richer specimens were handed to me by Capt. Martin himself at Montes Aureos. G. J. GUTHRIE.

NORTH TRESKERBY—"FAIR PLAY."

SIR.—I generally read with much interest your correspondent's (Mr. Charles Bawden) letters, and more especially on the Chiverton mines, with which interesting and wealth-producing district he seems well conversant; but I am sure I am not the only one who will have noticed with regret the undeserved and ill-natured remark with which he concludes his last week's letter, in which, while alluding to the North Treskerby Mine, he seems, from a sudden twinge of gout or some other cause, to be entirely oblivious of the time-honoured local motto "One and All." Indeed, there is something quite "barbarish" in his remark. The word suggests a horrible thought—that there may be a motive; but, no, let us suppress it ere it gains a footing in our minds. Now, Sir, although I am neither a mine agent nor broker, I have had some experience in West Country mining, and it certainly does appear to me that if ever there was a moment when North Treskerby Mine deserved a pat on the back, and a word of encouragement, it is now. See the plucky way in which it has so quickly come up to the front again, and already brought its balance to the right side of the ledger. How many a mine selling at a much higher price would like a balance on the same side of the ledger Mr. C. Bawden well knows. It has accomplished this in the face of an accident by which no man could foresee, and caused considerable outlay for new machinery and delay, during which no ore could be raised, and suffering, like its neighbours, from the awful depression of the metal and money markets. Let your correspondent count how many mines he knows that could have done ditto, or whose position and prospects are to be compared to North Treskerby. He can count them on his fingers, and have some to spare. A honest and *bona fide* concern should meet with fairer treatment from those like your correspondent, who, one would suppose, wish to see British mining a reliable and honourable object for employment of labour and capital. Is it any disgrace that a report is so elaborate that it tries to put the shareholders in possession of all the facts calculated to show their true position?

BESSEMER STEEL IN AUSTRIA.—The Stori Steel Works, at which the Bessemer steel is manufactured on a large scale, produce it in massive blocks, which are wrought therefrom by hammers and rollers into a merchantable shape. Before placing them in the market, however, samples are taken from these blocks and submitted to the most severe tests, such as these:—An octagonal bar, 2½ in. in diameter, was taken, and by one heat wrought into a rectangular bar, 1 in. by 1½ in., with clean, sharp corners. This was heated once and sharpened to a point; the sharp end was cut off and a nail head made upon it; this nail

was bent around an anvil corner while cold. Another rod, 1 in. by 1½ in., was bent like the letter S, hammered together and welded; the thick mass was hammered out to a point without showing any breaks in the corners. In a ¼ in. plate fifteen holes were punched, 1-24th in. apart, the plate remained without a crack, and the holes looked as though they were bored; the corner of the plate was then bent down like the corner of a visiting card. A bar 1½ in. by ½ in. was hammered into a chisel, hardened, and used to chip castings with excellent results; it was broken, and showed an excellent steady fracture; the other end was bent cold to a right-angle without cracking it in the least. No evidence of red-shortness appeared in any of the samples,

FOREIGN MINING AND METALLURGY.

It is remarked that Belgium very sensitively experiences the consequences of political complications. Does this industrial sensibility depend on the extreme development of industry in a country relatively small and extremely populous, having regard to its extent, or from the difficult competition which has to be sustained with England, which is less affected by political complications? Without attempting to solve these important economic questions, we must indicate the fact that on the first rumors of war in Germany, Belgian metallurgical industry began to suffer, while, notwithstanding the re-assuring reports of an early peace, the general position of Belgian metallurgical works has been improved to a very slight extent. No sensible amelioration can be said to have appeared during the last few days, and the production of the rolling mills continues to be restricted. A transaction of 200 tons has offered itself in the Charleroi basin, but on terms which could not be accepted. As regards pig, far from improving, its position is rather less favourable than it was last week. A slight fall has appeared in casting pig; some refining has changed hands at 35s. per ton on an average. Several of the construction workshops are pretty well provided with orders; we may mention that the house of Thevenet and Hansen of Mont-sur-Marchienne has received from Russia a contract for 200 trucks. The report of the Centre of Belgium Railway Company has just been issued. The report observes:—"The network which will be placed under the administration of the company of the Centre will unite the three coal basins of Mons, the Centre, and Charleroi to the consuming districts—Flanders, Brabant, and Antwerp. The Haut and Bas Flandre and Girelle of Charleroi line, the property of the Coal Basins of the Hainaut, will be united to the network of the Centre on the one hand by the line from Bonne-Espérance to Mons, and on the other by the line from Beauraumont to Marchienne; further industrial branches and secondary lines will unite to the principal lines almost all the collieries and important industrial establishments." Some contracts for freights from Charleroi to Paris have been concluded this week at 5s. 6d. per ton. The production of the Herbe coal basin in 1865 amounted to 276,339 tons, as compared with 248,900 tons in 1864, showing an increase of 27,433 tons.

Affairs continue to be sustained at St. Dizier in a tolerably satisfactory manner, and contracts for iron have been concluded at 87s. 16d. to 92s. per ton. The price of coke-made pig does not improve; it is offered as hitherto at 37s. per ton. Mixed pig is dealt in at 37s. 12d. to 47s. per ton, according to the proportion of combustible used; as regards charcoal-made refining pig a transaction has taken place at 47s. 10s. per ton, delivered free at St. Dizier. In the Moselle basin the price of pig shows a tendency to decline; it is remarkable, nevertheless, that the foundries are not without orders.

Progress has just been reported to the shareholders of the Montigny-sur-Sambre Blast Furnaces and Rolling Mills Company. It appears that the works executed in 1865-6 occasioned expenses exceeding the estimates by the sum of 1434. The execution of certain buildings and modifications introduced into existing apparatus have several times offered obstacles during the past exercise to the regular production of the works, and have injuriously affected the results obtained. To this anticipated cause of diminished profit two other unfavourable circumstances must be added. While the price of iron has remained stationary, the price of coal has experienced a considerable advance. The increased working expenses thus occasioned in the Montigny Works amounted for the year to 7318. In the second place, the company experienced last year much difficulty in obtaining a sufficient supply of good workmen, and the price of labour has risen to a point much higher than in the preceding year. These circumstances weighed heavily on the results of the last exercise. The Montigny Works have continued to occupy themselves especially with the manufacture of iron and pig of superior quality, and the relations established abroad have developed themselves, and have increased in importance year by year. The production in 1865-6 was 21,250 tons of pig against 19,550 tons in 1864-5, and of iron of various descriptions 39,394 tons in 1865-6 against 30,737 tons in 1864-5. The mines of oligiste minerals worked in 1865-6 produced 55,149 tons of minerals against 46,680 tons in 1864-5. At the same time certain difficulties and obstacles experienced in the working of these mines, the scarcity of labour, and the delay which has attended the completion of the Namur and Gheest Railway have prevented the company from realising during the past exercise profits from the working of the minerals of the company in excess of the amounts devoted to their redemption. The expenditure on works during the exercise 1865-6 was 10,039., while 5739. was applied in various redemptions connected with the works and mineral bearings. A sum of 3667. was carried to the reserve, which now amounts to 9518. A sum of 758. was also applied to provide for the reduction of the price of the iron in warehouse. After allowing for these redemptions and deductions, the balance-sheet presented showed a net profit of 1034., from which must be deducted 480., the minimum attributed by the statutes to the council of administration, the executive committee, and the council of surveillance. The balance of 574. has been carried forward to the credit of 1866-7. The circumstances which we have detailed—stationary prices for the products manufactured, disturbances in the production occasioned by works executed, an advance in the price of coal, and scarcity and dearth of labour—explain the results of the past exercise. It is hoped, however, that in future years benefits will accrue from the changes and extensions made at the works, and that the mineral bearings will also yield improved results.

The Belgian coal trade appears to be anticipating a revival in affairs. The supply of labour continues very restricted, and stocks are insignificant; it is almost certain that when orders for supplies arrive an advance will be the consequence of the state of business. For the rest, prices are maintained at present with the greatest firmness, the demand not having made default anywhere since the suspension of navigations, as has been clearly shown by numerous deliveries by railway, especially towards France. The rise in the coal continues to be maintained, which is not astonishing, as this description has always been in considerable demand, especially in the Mons basin. The coal supply question has engaged public attention in Belgium as well as in England. A proposal has been made to the Provincial Council of the Hainaut for the appointment of a commission of enquiry, and has been rejected, after a report by M. Hardy. It is incontestable, according to M. Hardy, that the wealth and industrial grandeur of a country depend in our period of progress on the economic conditions on which coal can be obtained; but it seems to him useless, and above all inopportune, to make enquiries in order to ascertain even approximately the duration of the coal basins of the Hainaut, since science lacks certain data, and reasoning can only be based on suppositions, which apparently correct one day, are contradicted the next. Thus, in 1843, it was announced by M. Gonot, that at the depth of 1660 feet there remained only 20 years' production to extract. The annual production of coal in Belgium was then 3,000,000 tons; 23 years have since elapsed, the yearly extraction has attained 11,000,000 tons, and the average depth of the pits in the Hainaut is still only 1248 feet. The difference between the predictions made and the facts accomplished gives an idea of the errors which science can commit. Still further, several coal basins have only begun recently their production, while those of the Hainaut have not ceased to develop themselves. The coal basin of Herbe, for instance, is far from producing all that might be expected from it. This basin is composed of 39 collieries, of which only 18 are in operation. Of these 18, three are accommodated by railways or by the Meuse; these are the collieries of Chartreuse, Cheratte, and Wandre; the other collieries have only communications by ordinary roads, and their production, which is very small, is consumed on the spot.

There has been no material modification in the state of the copper markets of France and Germany. On the Havre market Chilian is less firm, some sales made for delivery at the end of October having been effected at 78l. to 79l. per ton. In consequence of the favourable advices from England a slight amelioration has taken place on the Hamburg, Cologne, and Berlin markets; at the same time, transactions have been of little importance hitherto, and no change has taken place in prices. Copper has been the object of only unimportant transactions on the Paris market; English is now quoted at 81l., Chilian at 79l., and Corocoro at 82l. 4s. per ton. On the Dutch market Banca tin maintains itself at 46½ lbs. to 47 lbs., without provoking extensive sales. Two small affairs only are mentioned, one of 7000 ingots, at 47 lbs., and 200 ingots, at 46½ lbs. A lot of 120 tons of Billiton, and three parcels of 400 tons each, have been dealt in, but the prices have not transpired. The Hamburg market reflects the firmness of the English and Dutch markets. As regards the other German markets, although we cannot report great affairs, the tone is generally good, and prices are firm. At Paris prices have been nominal; Banca has made 82l., Detroit 82l., and English 81l. per ton. At Hamburg soft disposable German lead sustains itself in value, with little stock, nevertheless on delivery the article might be obtained on slightly lower terms. Berlin has displayed a more feeble tendency. In the expectation that exports of lead will be soon resumed, the Cologne market has become much firmer. Transactions have been restricted at Paris, rough French making 207. 4s. per ton, and Spanish has been quoted on the same terms. The Hamburg market has become more feeble. Up to within a recent period the Breslau market displayed a good tendency, and some rather important sales were concluded; the article has given way, however. The Berlin market has been also feeble. The Paris market has been without affairs, and prices have displayed a downward tendency, Silesian making 217. 16s. per ton.

PETROLEUM IN NEW SOUTH WALES.—At a recent meeting of the Geological Society of Manchester, Mr. E. W. BINNEY, F.R.S., the President, stated that Mr. JOHN MACKENZIE, M.E., formerly of Wigan, and now of West Hartley, New South Wales, a gentleman well known to many of the members, had sent him some specimens of Cannel coal (exhibited) from West Hartley, New South Wales, which are stated to be superior to the celebrated Boghead coal. One sample was said to yield 145 gallons, and the other 120 gallons of crude oil per ton. In all respects, the samples exhibited so much resembled Boghead coal, both in appearance and streak, as no one could distinguish the one from the other. The New South Wales coal, like the Scotch one, was very variable, soon disappearing and changing into common coal and black stone resembling Blackband. As the Scotch deposit would probably soon be exhausted by the great drains made on it for the manufacture of paraffin oil, this discovery was of great importance. The President said that in 1850 he bought Boghead coal at 13s. 6d. per ton, and it was now quoted at 80s. In 1843, when he read his paper before this society, showing that petroleum could be produced from the decomposition, or rather distillation, of peat at a low temperature, little was known either of the origin or utility of this product. In 1848

he (the President) went to Down Holland and showed this deposit to Mr. James Young, and explained how the petroleum was formed. This he did before he accompanied that gentleman down Mr. Oakes' coal pit at Riddings (Essex, 1849), and examined the circumstances under which the petroleum occurred there. Since that time it is wonderful to what an extent the manufacture of paraffin oil and the supply of petroleum have reached. Probably no articles of commerce ever made greater strides in the same time. If such had been the case in Scotland and America, no doubt great results would ensue from the discovery of Boghead coal in New South Wales.

Meetings of Mining Companies.

SOUTH WHEAL LEISURE MINING COMPANY.

At a preliminary meeting of influential shareholders of the South Wheal Leisure Tin and Copper Mine, which was held at the Guildhall Tavern, on Thursday, it was resolved,—"That the purser be requested to convene a special general meeting of adventurers in the mine as early as possible, and such meeting to take place at the counting-house, for the purpose of electing a committee of management for the further development of this long-neglected and valuable property."

[This week a large business has been done in the shares at present quotations, and from the prospects, coupled with the new management, the shares are fully expected to reach high prices. The South Wheal Leisure stands in the midst of the finest mining district in Cornwall, having for its neighbours Perran Great St. George and Wheal Leisure, which have paid upwards of 890,000/- in dividends; the Polberro, which has paid upwards of 300,000/- in dividends; the Blue Hills over 100,000/-, and the Trevaunance upwards of 150,000/-; and, from the reports of the best mining authorities, the lodes have the same appearance as the above mines before they were fully developed. All the necessary plant, including steam-engine, &c., is already erected, and the only expense to bring this property into a paying state will be confined to manual labour, and, with a comparatively small outlay, it may become one of the great prizes of the county.]

GELLIVARA COMPANY (LIMITED).

The adjourned general meeting of shareholders was held at the London Tavern, Bishopsgate-street, on Tuesday,

Mr. HUGH C. SMITH in the chair.

Mr. H. D. STEAD (the secretary) read the notice convening the meeting and the minutes of the preceding one, and the statement of accounts, showing a profit on the operations during the year 1864 of 1607. 3s. 1d., and an estimated profit for 1865 of 1392l. 7s. 5d., was submitted.

The CHAIRMAN, in moving the reception and adoption of the accounts, observed that he ought to explain the remark which the auditors had appended, to the effect that they "would probably need some amendment on receipt of fuller, more recent, and authentic accounts

stoppage. The scheme was sound and practicable, and only required the expenditure of capital to develop it.

The Rev. R. MIDDLEMIST suggested that three independent shareholders might be appointed to confer with the directors, to facilitate the reconstruction being carried out, and this suggestion was approved by the meeting. It was then resolved to reconstruct the company, by forming a new company, with 30,000 shares of £10 each; that those who have paid 20/- upon the 50/- share should receive an equivalent of new 10/- shares, representing 4/- each; that shares forfeitable previous to the reconstruction be forfeited; that the forfeited shares be sold for the benefit of the company, credited with 4/- paid; that the old debentures be exchanged for debentures in the new company; that three shareholders be selected to confer generally with the board as to the prospects, and its time of issue; and that Messrs. Campbell, Rev. R. Middlemist, and Murton be requested to confer with the board, in accordance with the previous resolution.

A unanimous vote of thanks to the Chairman terminated the proceedings.

WORTHING MINING COMPANY.

The annual general meeting of shareholders was held at the offices, St. Helen's-place, on Monday.—Mr. CYRUS LEGG in the chair.

Mr. W. J. LAVINGTON (the secretary) read the notice convening the meeting. The report of the directors (which appeared in last week's Journal) was read.

The CHAIRMAN said that, doubtless, the shareholders participated in the regret felt by the directors in not being in a position to declare a dividend upon the present occasion; but they would also join the directors in the satisfaction expressed in the report that the company was now more than 2000/- better off than at the corresponding period of the preceding year, for next to spending money the greatest pleasure should be to pay one's debts. The success attending the company's operations during the past year was attributable in no small degree to the indomitable perseverance of the colonial committee, and more particularly to their acting manager (Mr. Alfred Hallett)—for when he looked at the low-class ores produced, and the low prices realised, it was indeed surprising that such results had been realised. It was true they were spending a very large sum of money in the colony—indeed, they were spending more of their profits than such mines as the Moonta and Wallaroo. When he mentioned that the costs during the past year had been 500/- per week, that the consumption of wood amounted to 15,000 tons annually, or a quantity equal to the carrying capacities of 15 ships of 1000 tons burden, the vast amount of work done at the Bremer Mine was apparent. The present low price of copper had been the only cause which precluded the directors realising the hope expressed at the last meeting with respect to a dividend—for had the price been realised which was current during one month of the past year, the directors would have been in a position now to recommend the division of a satisfactory amount. The fact that during the past two years the Bremer Mine had yielded as many as 1300 tons of regulars, equal to 640 tons of fine copper, showed that there was a large metallic reserve in the property, the benefit of which the shareholders would reap sooner or later. If copper advanced anything like 15/- or 20/- per ton, the directors would be at once in a position to declare satisfactory dividends. It was true that the present raisings of about 3000 tons of ore per year could be increased; but he admired the judgment exercised by the colonial committee and manager in not doing so, because it would have to be sold at the present exceptionally low prices. They have got through 29,000/- in the year, which was a considerable item for a mine of this description, and if the percentage of the ore was only as large as many other mines in the colony the shareholders of this company would be realising similar splendid results; but he did not despair, although he anxiously awaited the time when copper would command an improved price. (Hear, hear.) The directors were fully convinced that the colonial affairs of the company were administered by men of probity and integrity, and that in their acting manager they had a man of persevering industry, and as such they looked for the indulgence of the shareholders a little longer, in order to realise their expectations. With reference to Wheal Maria, he might state it was the decided opinion of the directors that until some tangible result was realised from Bremer it would be folly to expend money upon another mine; but when large and satisfactory profits were being realised it might be judicious to set apart a proportion for the development of Wheal Maria. Upon the last occasion, it was decided that the vacancy occasioned by the resignation of Mr. Board should not be filled up, but now the shareholders would be asked to exercise their judgment in filling up that vacancy. Having stated that nothing was more unpleasant to him, as Chairman, to meet the shareholders again and again without offering some remunerative evidence of the result of the company's operations, he assured the shareholders that no effort was spared on the part of the directors to promote the best interests of the undertaking, and although as yet results had not been realised in accordance with the anticipations expressed the last time he had the pleasure of addressing them, they knew that with an advanced price of copper those anticipations would not only be realised, but far exceeded. He concluded by moving the adoption of the report and balance-sheet.

Mr. R. HALLETT said he was quite satisfied with respect to the management of the mine in the colony, but not with what the directors had done at home. It had always been the custom to append the report of the acting manager to that of the directors, and he wished to know why that course had not now been adopted. He then moved that the report of the acting manager should be read.

The CHAIRMAN said there could be no possible objection to the report being read, but that the motion before the meeting was that the report and balance-sheet should be received and adopted.—Mr. R. HALLETT said if the Chairman refused to have the report read, he would give the shareholders some of the particulars it communicated. Having read several extracts, he stated that it contained much more information than that of the directors; in fact, the latter was but an extract of the former. As regards the directors, he did not see the use of them, seeing the whole of the important business of the company was conducted in the colony by the colonial committee and the acting manager.—The CHAIRMAN said there was no information the shareholders wished which would not be readily communicated; but, as he had already said, the motion before the meeting was, that the report of the directors should be received and adopted.

Mr. R. HALLETT then moved, as an amendment, that the report of the directors be not adopted, and that the report of the acting manager be adopted in lieu thereof.—Mr. FORREST seconded the amendment.

The CHAIRMAN, before putting the question, stated most distinctly that he and his brother directors had but one object in view—the promotion of the interest of the company. (Hear, hear.) Mr. Hallett had said that the directors were of no service whatever, but Mr. Hallett did not think so when he was upon the board, for when Mr. Hallett was Chairman of the company everyone who differed from him was always stated to be in the wrong. Mr. Hallett had also stated that the colonial committee and acting manager could transact all the business of the company without the aid of directors. Now, there was no man for whom he (the Chairman) had a greater respect than for Mr. Alfred Hallett, and there was no man more honest in his intentions towards the company; but the position in which Mr. Richard Hallett wished to place the company by having a sort of finance committee, was no doubt to afford Mr. Richard Hallett an opportunity of becoming the agent of the colonial committee, and to receive the commission upon the sales of ore, and thus reap that profit instead of the company. (He (the Chairman) felt satisfied that Mr. Hallett would never have made the observations he had if he were not outside the board, but he had forgotten the fact that a 2 per cent. commission upon 30,000/- worth of ore amounted to 600/-, and that the directors' remuneration was only 200/-; therefore, the directors saving the commission benefited the company 400/- per annum. As regards the report of the manager—which there could not be the least hesitation should be read—he (the Chairman) knew the time when Mr. Hallett used to say at the board meetings—"Don't let that be printed, because it will give them the pith of our directors' report." After some further observations in reply to Mr. Hallett, he put the amendment, which was lost, when the motion was put and carried.

Upon the suggestion of a SHAREHOLDER, the report of the manager was read.

Mr. W. J. Jackson was re-elected a director. Upon the proposition of the CHAIRMAN, seconded by Mr. MARSHALL, Mr. C. R. Essex was re-elected director.

Mr. ESSEX having acknowledged the renewed mark of confidence, stated that although the London board did not appear to receive the thanks of the whole of the shareholders, yet he could assure the meeting that during the recent financial crisis there had been some very serious matters to decide—indeed, had it not been for the extraordinary assistance of their worthy Chairman and the board generally, he (Mr. Essex) very much questioned if the company's affairs could have been carried out, so that the London board had been of some assistance. (Hear, hear.)—Mr. C. A. Elliott was elected a director in the room of Mr. Board, resigned.—The retiring auditors were re-elected.

Upon the proposition of the CHAIRMAN, seconded by Mr. MARSHALL, a unanimous vote of thanks was passed by the colonial committee, and especially to Mr. Alfred Hallett and Capt. Prisk, for their continued exertions in the interest of the company, and that the directors be requested to communicate the same in the most pleasing terms.

Upon the proposition of Mr. ELLIOTT, seconded by Mr. Cox, a vote of thanks was passed to the directors for their attention to the business of the company during the past year.

The CHAIRMAN, on behalf of the directors and himself, tendered his sincere thanks for the compliment just paid. So long as they sat on that side of the table their aim would continue to be merit that confidence. Notwithstanding the small amount of remuneration received, they would be amply repaid by continuing to gain the confidence and support of the shareholders, but they hoped the time was not far distant when an opportunity would be afforded for an increased remuneration. (Hear, hear.)

A vote of thanks to the Chairman terminated the proceedings.

LONDON AND SOUTH-WESTERN BANK.

A general meeting of shareholders was held at the London Tavern, on Tuesday, Mr. SIDNEY H. HADLEY in the chair.

Mr. E. GORDON CLEATHER (the secretary) read the notice convening the meeting.

The report of the directors stated that (after writing off bad and making provision for doubtful debts) the account showed a gross profit of 29,500/-, including the amount brought forward from the previous half-year; and, after payment of all expenses, interest, &c., there remains a disposable balance of £227L. The directors recommend the payment of a dividend at the rate of 6 per cent. per annum, free of income tax, and that the balance of 227L. (which includes 1139/- rebate on bills not due) be carried to the profit and loss new account. The directors state that, notwithstanding the recent monetary crisis, the business of this bank continues to improve, and that during the past six months many valuable connections have been secured. The amount due by the bank on current, deposit, and other accounts is £48,056L. The liabilities on acceptances reach £8,569L.

The CHAIRMAN said that there could not be a divided opinion as to the satisfactory character of the report just read, particularly when there was taken into consideration the state of the monetary world since the last meeting. When the various attacks which public institutions of this kind had been subjected to were remembered, the shareholders in the London and South-Western Bank had full grounds for congratulating themselves that the public had vouchsafed to their bank that confidence which—a young institution—they had no right to expect. (Hear, hear.) From the smallest beginnings the business up to the present time had gone on daily increasing; and although the present balance-sheet in some respects did not ap-

pear so favourable as the last, yet he might say that at the moment it was drawn up it stood at the very lowest point during the whole six months, and that the present state of the accounts was much more favourable. (Hear, hear.) He need not trouble the shareholders with a comparison of the present with the last balance-sheet, but if he were to do so he should refer to the addition of 1500/- to the reserve fund; to the amount of money fairly in hand upon customers' balances, in juxtaposition with the acceptances, which in previous balance-sheets appeared as one item; and to the profits made during the last half-year, being an addition to that of the two previous six months of 5000L. (Hear, hear.) As the report really contained all the information the directors had to communicate, he would content himself by moving its adoption, and that a dividend for the half-year at the rate of 6 per cent. per annum be declared on the shares of the company.—Mr. ERNEST ZUCCHANI seconded the proposition.

A PROPRIETOR would have been glad to see the whole of the amount standing to the credit of profit and loss account carried to the reserve fund, that fund being an item of great security, although he was perfectly willing to maintain that, considering the successful way in which the bank had passed through the severe crisis, its position was unimpeachable. (Hear, hear.) He wished, however, to say that he could not understand why the item of preliminary expenses always stood in their balance-sheets. All would agree it was a matter of congratulation that, considering what had been going on in the financial and commercial world, the directors were able to present such a balance-sheet. (Hear, hear.) The salaries paid to the officers were thoroughly earned, and the general expenditure was moderate. (Hear, hear.)

The CHAIRMAN said that the reason the amount to be placed to the reserve fund was not stated in the report was because such additions were made at Christmas in each year. Of course, if the shareholders would rather not have a dividend, and request the directors to carry the entire reserve fund, it must be done, but he had no hesitation in saying that the payment of a dividend could be well afforded. (Hear, hear.) As regards the preliminary expenses, the object was to reduce the amount from time to time, as the accounts would show. Upon the last occasion 500/- was paid off—the amount would be gradually reduced in accordance with the rule generally adopted.

Mr. YOUNG could not allow the opportunity to pass without expressing his gratitude to the directors for the very expressive and satisfactory report they had presented. He was sure he was conveying the sentiments of the whole body of shareholders when he stated that such a balance-sheet as that now before the directors—showing as it did an increase of 5000/-, or 6000/-, as compared with the previous balance-sheet—not only reflected the greatest credit upon the London and South-Western Bank, young as it was, but that it was a result which could not have been expected during such a condition of the money market. (Hear, hear.) He believed that the directors in presenting such a balance-sheet had done more to restore confidence in such institutions as the Bank of England, than anything else, and for which he returned them his most cordial thanks. (Hear, hear.)

Mr. EDWIN H. GALSWORTHY fully coincided with the previous speaker. Speaking as one of the auditors, he knew there were good grounds upon which the shareholders might congratulate themselves. (Hear, hear.) As one who had tested a great deal of interest in the bank, he might say that there must have been within it a certain amount of power—of resources—which was positively available, to enable the directors to carry their operations through such an exceptional period during the last six months; and if the crisis should last for months yet to come, shareholders need have no fear that the London and South-Western Bank would not fully maintain its character. (Hear, hear.) He tested to the fact that the present balances were very much higher than those in the balance-sheet, and that, notwithstanding the present difficult state of the money market, they were positively getting back their balances, which was an evidence of the public confidence in the London and South-Western Bank. (Hear, hear.) As regards the reserve fund, a fair amount had been appropriated out of the profits, and the dividend, which had been fairly earned, could be safely declared. (Hear, hear.)—The motion was then put and carried unanimously.

A special vote of thanks was passed to the Chairman and board of directors for the able manner in which they continued to conduct the affairs of the bank. The CHAIRMAN having acknowledged the vote, expressed the most confident opinion in the progressive success of the bank.

A vote of thanks was passed to the auditors.—The CHAIRMAN then proposed a vote of thanks to Mr. G. A. Addison, the general manager (upon whose commercial acumen and general ability he passed a high eulogium), to the branch managers, and to the other officers of the bank, for the assiduous zeal with which they had discharged their respective duties.—The motion having been duly seconded, was put and carried with acclamation.

The proceedings then terminated.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market continues inactive, and the transactions during the week (except in one or two favourite mines) appear to have been of a very limited extent, notwithstanding the usual fortnightly account, which took place on Thursday. Cheerless as the Mining Market has been for months past, with but little encouragement to hope for better times—mines giving employment to hundreds of the mining population having for weeks after weekly suspended, or labour lessened—a sudden gleam broke forth on Thursday, simultaneously with the reduction of the Bank rate of discount, on a rumour that tin had advanced, thereby affording some grounds for hoping that a favourable change is about to set in.

Whether the advance be of a transient character, or the harbinger of a more satisfactory and permanent nature, remains to be seen, still it will, no doubt, lead to more active business; and unless this be supported by an improved standard for copper ore (of which there is but little to fear), and a firm average price for tin, there is cause to apprehend ruin to British mining, and great destitution among its community; still what we have is accepted with gratification.

WHEAL SETONS have been offered at lower rates, and but little business done.

—WEST SETONS are remarkably quiet.—CLIFFORDS have been dealt at improved prices, arising, no doubt, from the great improvement which has taken place in the mine.—COOK'S KITCHENS shares changed hands at quoted figures.—

EAST BASSETS are quiet, and buyers scarce.—EAST CARN BREAS have been good request at advanced rates, and numerous transactions reported.—TINCROFTS have further declined, and more freely offered.—WEST CHIVERTON has been less active than ever.

—CHIVERTON'S are also quiet at present rates.—CHIVERTON MOORS have receded, and but little dealt in, in consequence of an expected heavy call.

NORTH TRESKERBYS have been rather largely dealt in at fair market prices, and the mine being reported to have improved.—GREAT LAXEYS are slightly firmer, and more likely to go better.—GREAT NORTH LAXEYS are dull, and more freely offered.

EAST GREENVILLES have changed hands, but prices are lower.—WHEAL GREENVILLES are rather quiet.—GREAT WHEAL BUSY, HALLENBEAGLE, and GREAT NORTH DOWNS have been offered at nominal figures, in consequence of the expected suspension of the former.—GREAT VORS have been in fair demand, and prices slightly improved, with a tendency to further advance.—EAST LOVELLS have been remarkably quiet, although sought for at buyers' prices.—EAST CARADONS have changed hands at lower rates.—MARKE VALLEYS have been dealt in at fair market quotations.—WEST CARADONS have been done at present advanced rates, and numerous transactions reported.—PRINCE OF WALES have been good request at advanced rates, and numerous transactions reported.—TREASVEAN shares have fluctuated in value; some of the shareholders have been induced to sell or relinquish; but it is hoped that ere long dealings will be less restricted, and that many good mines long neglected will find support. There are many mines now selling at nominal prices, which will, doubtless, repay the purchasers many hundreds per cent. during 1867. Recent dealings have comprised CLIFFORD AMALGAMATED, which have advanced to 7½/-; EAST CARADON required for 6½ to 7½; MARKE VALLEY, 3½ to 4; NORTH TRESKERBY, 2½ to 3½; PRINCE OF WALES shares fell suddenly to 20s. 22s., the lode having fallen off in value; GREAT RE-TALLACK rose to 1½ to 2½, but close ½ to ¾; CREBROD, 20s. to 12s. 6d.; SETON, 12s. to 12½; GREAT VOR, 18½ to 19½. A good advance in tin would sensibly affect these shares. EAST LOVELL also required for.

CHONTALES (Gold) are quiet; the mines, however, are undoubtedly rich, and a large monthly yield of gold shortly is not improbable. Railways are better, and may be expected to improve with cheaper money. Large speculations are taking place in Anglo-American telegraphs, and improved prices looked for.

From Mr. JAMES HUME:—At last, after many months of severe

trial for mining and all interested in it, the horizon begins to clear, and the gloom that has so long clouded the market is giving way. The demon of war is satisfied. Peace is again restored, and the bank rate down to 8, and it is

whispered will be 6 in two or three weeks, and 4 per cent. in two months. The effects of an easier money market will immediately influence the price of metals, and a rise of 3L. in tin is already announced.

Large-producing mines will, therefore, be greatly benefitted, although some months must elapse before much improvement will appear in their accounts.

It is a great satisfaction to be able to speak hopefully, and to feel that now the tendency is in the right direction.

As regards the market, orders from the public have been sufficiently scanty, and the inclination has been to sell or relinquish; but it is

hoped that ere long dealings will be less restricted, and that many good mines long neglected will find support. There are many mines now selling at nominal prices, which will, doubtless, repay the purchasers many hundreds per cent. during 1867.

Recent dealings have comprised CLIFFORD AMALGAMATED, which have advanced to 7½/-; EAST CARADON required for 6½ to 7½; MARKE VALLEY, 3½ to 4; NORTH TRESKERBY, 2½ to 3½; PRINCE OF WALES shares

fell suddenly to 20s. 22s., the lode having fallen off in value; GREAT RE-TALLACK rose to 1½ to 2½, but close ½ to ¾; CREBROD, 20s. to 12s. 6d.; SETON, 12s. to 12½; GREAT VOR, 18½ to 19½. A good advance in tin would sensibly affect these shares. EAST LOVELL also required for.

CHONTALES (Gold) are quiet; the mines, however, are undoubtedly rich, and a large monthly yield of gold shortly is not improbable. Railways are better, and may be expected to improve with cheaper money. Large speculations are taking place in Anglo-American telegraphs, and improved prices looked for.

From Mr. J. B. REYNOLDS:—Most welcome is the fall in the Bank rate to 8 per cent. The effect of this, so far as the mining interest is concerned, will be indeed most beneficial. With every prospect of peace abroad, and plenty

at home, we may take a cheerful view of the future. It is to be hoped that all those companies which have of late been crippled by the unsatisfactory state of affairs in the Money Market will now consider whether operations on a more extended scale cannot be at once contemplated. There can be no doubt but that money will be very cheap again, comparatively speaking, and that probably before long.

In calling the attention of the public to mines not dealt in on the London market, my satisfaction increases as I proceed in the task; but still I do not desire to divert all attention from market mines, which in many instances have great merit.

At the present moment I believe the capitalist can make a selection from market mines which would pay him handsomely before long; but, nevertheless, I do prefer investment something that pays regular dividends, and which is carried on without any reference whatever to the mining market.

I cannot too highly speak of the very satisfactory manner in which the properties under the management of Messrs. Taylor and Sons are conducted;

the pleasing result of good management is evident at all times, but I do not believe if their mines had been the stock jobbers' playthings they would have been working to-day, much less paying dividends.

All appear now to agree with your correspondent on the wisdom of insisting on the prompt payment of calls under all circumstances. Unfortunately, there are now many companies brought into very difficult circumstances through the management being too lenient on this vital point.

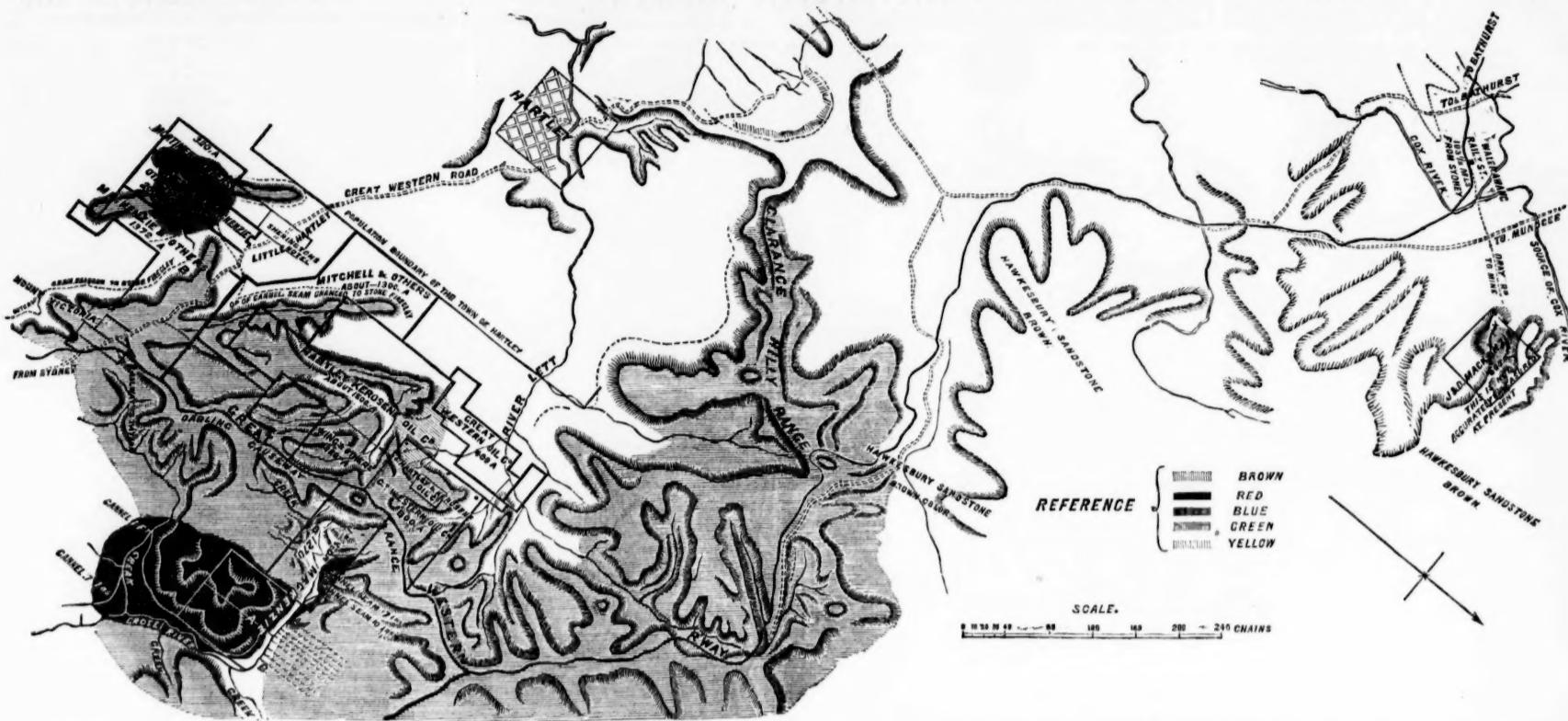
There are persons disengaged enough to go on to any length of time evading payment, and at the same time refusing to transfer or relinquish their shares. The serious attention of shareholders should be given to this question.

The South Callington committee deserve, I think, the warmest thanks of the shareholders in that company, because of their conduct in this matter.

There is not one call made previous to the last meeting now unpaid.

It is the practice never to declare a call if there are any arrears due. The plan is simple enough, and it would be well for all to put it into

PETROLEUM IN NEW SOUTH WALES—MAP OF THE DISTRICT.



Owing to the reduced scale of the above map compared with Mr. Mackenzie's original, many of the references have been necessarily omitted; the subjoined explanations are, therefore, necessary:

The boundaries of the different Boghead Cannel Coal land owners are not as yet all surveyed, and are shown on this plan about as they were applied for. The outer line (coloured red in the original), when full, denotes where the Cannel has been found of good quality; when dotted, that the Cannel seam is either improved or proved to be worthless.

With regard to the colouring, the darker patch near the upper left-hand corner is blue in the original; the darker patches at the lower left-hand corner, red; the lighter patch in the Hartley Kerosene and Great Western Oil Companies section, yellow; the patch to the extreme right is green; and the remaining shading is brown.

The Mount Victoria Railway station is 77 miles from Sydney, and 3524 feet above the level of the sea. The Grose River Cannel seam outcrop extends from the point marked "Cannel, 1 ft." to the corner of John and Dr. Mackenzie's plot, A, and thence (always within their sections) nearly parallel with the Grose River, and distant about 10 chains therefrom. The portion of the seam opposite where the word "river" occurs has not been proved as to thickness, but loose pieces of Cannel are to be seen below in the alluvium. The nine lines between A and B are intended to represent the position of nine trials of the seam. The thicknesses were—1 ft., 1½ ft., 1½ ft., 1 ft., 7 in., 1½ ft., 1½ ft., and 1½ ft. respectively, showing the seam to be very regular.

Turning to the blue patch, the seam has been tested in two places near together, in "King and Others' 200 acres," and in "Mackenzie and Others' 1372 acres." It was proved to be 1 ft. 9 in. Cannel seam in each case. In "Mortimer and Others' 329 acres," the seam proved is 1 ft., 5 in. thick; just outside the boundary it is 10 in. thick. In "John and Dr. Mackenzie's 170 acres," the seam is 10 in. thick, and where it crosses the Little Hartley section, two trials have given 1 ft., 1 ft., 5 in. In the "Hartley Kerosene Company's 1500 acres," the seam outcrops 1 ft., 6 in. The dots in the "Great Western Oil Company's 800 acres" show the one (in the upper corner) a shaft 30 ft. deep to the Cannel seam, the other bore-holes; the seam is 5 ft., 6 in., thinning to 4 ft., 6 in. in a dip near shaft and south of it. The bore-hole near "King and Others' 329 acres" is down 210 ft., and no Cannel found.

The Walerawang Railway station is 3026 ft. above the sea level. In "John and Dr. Mackenzie's Cox River plot" the northermost seam has been proved in four places, and found 9 in. at extreme west, increasing as it goes eastward to 15 in.; the northermost seam gives 9 in. of Cannel.

The Mining Journal of July 7 there appeared some interesting particulars relative to the petroleum deposits of New South Wales, and the position of the several properties will be at once seen from the above diagram, which has been forwarded by Mr. Mackenzie by the last mail, accompanied by the following description:

These deposits are very irregular in their area, and are found in isolated patches, generally a great distance apart, and in the midst of the workable coal measures of New South Wales, and whilst the coal seams are very regular in their character (with the exception of their gradually improving in quality and thickening as they leave the edge of the coal basin), the Cannel is most irregular, and there is nothing to guide us in finding out where the seam is likely to be good but the finding of pieces of Cannel. The part coloured brown on the tracing denotes the Hawkesbury or Sydney sandstone, which at Hartley immediately overlies the workable coal measures of New South Wales. The following is a section from the top of the Hawkesbury sandstone at A on plan (see my land in the Grose Valley) to the rocks below the lowest coal I have seen cropping out there:

Hawkesbury or Sydney sandstone	Fee 690 0
Blue metal	1 6
Coal No. 1, at B on plan, only 2 ft. to 3 ft. of coal, and 3 ft. black metal	5 6
Fire-clay and blue metal	1 0
Rock	32 6
Coal	1 0
Sandstone	6 0
Coal and black metal, No. 2	7 0
Coal, No. 2	6 6
Various strata	53 0
Coal and black metal	1 3
Coal and black metal	0 3
Various strata	2 4
Blue shale and metal	139 0
Blue shale and metal	12 0
Sandstone	2 0
Blue shale	1 0
Cannel coal seam (832 ft. below railway line)	1 6
Soft pipe-clay and metal	1 0
Sandstone and conglomerate, 70 ft.	80 0
Coal	0 6
Sandstone, &c.	8 0
Coal	1 2
Sandstone	16 0
Blue metal	2 0
Bituminous shale } contains oil	0 9
Sandstone	2 0
Bituminous shale	1 0
Underclay, sandstone, and metal	6 7
Conglomerate	25 0
Coal	1 1
Sandstone and shale	11 9
Coal	0 6
Underclay	0 5
Sandstone and shale	10 0
Coal	0 3
Sandstone, shale, and conglomerate, to be seen for	500 0
Total feet	1541 4

From the above section it will be seen, as I have before stated, that the Hartley Boghead Cannel coal has coal seams and coal measure strata above and below it; the seams of Cannel at the patch coloured blue and yellow being identical with the seam shown in the section at letter A in the Grose Valley. The distance from the bottom of the Hawkesbury sandstone to the Cannel at the patch coloured blue is about the same as it is in the Grose. I have not as yet had time to ascertain the number of seams of coal above and below the Cannel at the patch coloured green, but I have seen seams of coal both above and below it. We find that towards the centre of the patch the Cannel is the thickest, and that it thins in every direction towards the edge. The patch coloured yellow being the only one of the five deposits I have described that is at present proved near the centre, it is impossible to say what thickness the Cannel will be at the centre of the other four. The diagram will show that by far the largest area of the Cannel seam is worthless, and that the seam is

only good in isolated patches, generally at great distances apart. It generally gradually changes from good Cannel or bituminous shale into hardened clay, ironstone, stone, and clay, with coal, &c., and in the Grose Valley in some places it gradually changes from blue metal into bituminous shale and Cannel. The bituminous shale, tops and bottoms of Cannel, and roof and floor of the mine being, when the deposit is a rich one, full of glossopites, phylloctenes, verterbarian, and the usual fossil flora found in this vast coal basin. It will also be seen, from the broken nature of the country over the small area of the coal field embraced in it, that we have opportunities rarely offered of tracing and examining the seam along its outcrop for a distance of 40 to 50 miles, and it has already been examined in numerous places for longer distances to the north-west and south-east of the tract of country shown on my plan.

The Cannel in the patch coloured blue, yellow, and red, lies from 600 to 890 feet below the level of the railway line, whilst the Cannel in the Walerawang patch lies about 100 to 200 feet above the level of the railway line at the Walerawang Railway Station, and is about

20 miles nearer to Bathurst and the western gold fields by road, and 26 miles by railway; and the distance from the Walerawang patch to the railway station only being about 2½ miles, and a good dray road to it, one team could easily take 20 tons of Cannel a day. The railway is to be opened to the Hartley Station in May, 1867, and, probably, a few months later to pass the head of the Grose Valley, and in December, 1868, to the Walerawang Railway Station.

As to companies formed, and land proved, in the different deposits described. There are already two colonial companies formed for working the Cannel coal at Hartley, and making refined oil from the same deposit of Cannel coal, each company having secured a portion.

Part of patch coloured yellow.—1. The Hartley Kerosene Oil Company, with works erected on Young's patent, who are now making refined oil on a small scale, which they are preparing to enlarge upon. The oil is proved to be of the very best quality.

Part of patch coloured yellow.—2. The Great Western Oil Company. They are only at the present time proving their land by sinkings and borings, to see what thickness and extent of Cannel they have on it. At the present time they have only proved the Cannel at one end of their land, but they are now sinking and boring at other places (see plan), and will in a very short time have proved the existence or non-existence of the Cannel in other places.

Patch coloured blue.—I am the only one of the owners of this deposit who is at the present time working the Cannel, although the Cannel, as you will see from the plan, is proved in several places. I am driving two headings in the Cannel in my 170-acre allotment, towards the centre of the patch, where it will increase in thickness.

Red patches.—In the Grose Valley large patch I have proved the Cannel in about a dozen places, for more than half-a-mile along the outcrop, and near the edge of the deposit, to be 1 foot 6 inches in thickness, and I purpose further proving it by driving towards the centre of the deposit. I have a horse-track made from the railway line to where the Cannel is proved in the large patch.

Patch coloured green.—I now have men driving headings and sinking shafts to the Cannel, so as to prove its extent and thickness over a larger area. It has every appearance of being a very rich deposit, and I enclose you a small sample to burn. The plan shows where it is at present proved. There is great quantity of bituminous shale and black stone over the Cannel, which the more we approach the centre of the deposit contains more oil, and it burns well at C on plan. It has a great quantity of excellent pipe-clay above and below the Cannel.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

CHONTALES.—According to advices received by the West India Mall on Monday, some of the machinery was to be set to work last month (July), and with the aid of it alone a large quantity of gold is expected to be returned. We think it very likely that the first regular remittance will be received next month. The heavy machinery is not yet on the mines, which delays their being got into full working order; but when that takes place we have little doubt the result will bear out the anticipations which have been held out.

GREAT WHEAL VOR.—Wheal Metal continues to look well. The bottom levels are improving. The usual quantity of tin for the monthly sale.

FURSDON.—As might probably have been expected from the reference in last week's Journal to this mine, the discovery therein alluded to and the general prospects of the mine continue to progress as fast as can reasonably be expected. The greatest confidence in its ultimate success is entertained.

SOUTH CROFTY.—They have cut through the new lode, No. 3, referred to in my last, and at present it appears to be worth 12/- per fm.; it will be further opened upon by the account-day, which will be held on Aug. 27.

SILVER BROOK.—This compact little undertaking is likely to fulfil the anticipations of the directors, and as the price of shares is gradually advancing, it is considered that intending investors will do well to make their purchases without delay.

NATIONAL TRELAWNY (Liskeard).—This young mine, we are informed, continues daily to improve, and is attracting an unusual share of attention. The lode at the shaft is valued at 10/- per fathom, and, taking into consideration the present shallow depth at which mineral is being obtained, and the fact that the lode now being developed has gradually improved in appearance every fathom that has been sunk on it, it may fairly be anticipated that this sett will soon add another to the list of very profitable mines for which the district in which it is situated is so celebrated.

WHEAL HARTLEY.—This mine bids fair, from present prospects, to add another to the list of wonderful deposits of copper which in years gone by placed the district about Camborne, and extending from Redruth to Hayle. The great copper mines of those days were Dolcoath (the parent), the Roskears, the Croftys, and more recently the Setons, to the west of which group there is a tract of unexplored ground, until we reach the old Trevaskus, formerly one of the richest copper mines; and then the Alfreds, in which copper has also been found in the largest masses, and from which enormous profits have been derived. Wheal Hartley is midway between the two groups of mines referred to, and embraces the same lodes. The 60 fm. level, which is 83 fms. from the surface, has been reached, and at this depth, which is the one at which the

other mines referred to have generally been found to become rich in metal, the lode is of a masterly size, being from 6 to 8 feet wide, and producing throughout a highly favourable matrix, composed almost entirely of quartz, blonde, mica, and tin, throughout which there are large lumps of rich yellow copper ore. The former agent of Alfred Consols, by whose enterprise that mine was discovered, has recently visited Wheal Hartley, and says that the appearances are precisely the same as those which immediately preceded the cutting into the great deposit of copper at the former mine, and that, until within a fathom or two of the discovery, there never were such fine rocks of copper ore found in Alfred Consols as those which Wheal Hartley is now producing.

CAMBORNE, AUG. 15.—Little or no business has been negotiated since my last advice. Clifford, 6/- to 6%; Cook's Kitchen, 2½ to 2¾%; Chiverton Moor, 4%; Carn Camborne, ¾ to ¼%; the lode in the cross-cut, driving south, is worth 12/- per fathom; the 50 west, 5/- per fathom; the 40 west, 6/- per fm.; the 24 east, 5/- per fathom; the 24 west, 7/- per fathom. The lode in the western shaft, sinking below the 24, is worth 8/- per fathom. The other parts in operation are comparatively poor. East Bassett, 13 to 14; East Carn Brea, 1 to 1½; East Grenville, 2 to 2½; Great Retallack, ½ to ¾; Herodfoot, 30 to 32; North Treskerby, 2½ to 3½; Providence, 21 to 23. Prince of Wales, 1½ to 2½; the lode in the 45 west is fully 6 feet wide, yielding 2½ tons of good quality ore per fathom. St. Ives Consols, 5 to 6; Tincoff, 7 to 8; can anyone inform the readers of the Mining Journal as to when the next meeting of adventurers will be held? West Chiverton, 63 to 65; West Seton, 102½ to 110; a dividend of 1200/- (3/- per share) was declared at the meeting on Tuesday. Wheal Seton, 135 to 140; the accounts presented at the general meeting of shareholders, on Monday, showed a credit balance of about 800/-, after allowing for the loss sustained by the Falmouth Bank. At the Doleath meeting, on Monday, a dividend of 1/- per share (35/-) was declared, and the credit balance augmented about 50/- Several large shareholders were present, amongst whom were Sir W. Williams, Bart., and Mr. J. F. Bassett, of Tehidy Park. West Condurrow Mine meeting was held at the account-house yesterday (Tuesday). A call of 3s. 9d. per share was made, and the mine abandoned. West Frances Mine account comes off tomorrow (Thursday).—ALBERT PRINCE: *Per curia.*

SALE OF MINING SHARES.—Mr. Charles Thomas (late of Messrs. T. P. Thomas and Son) held his first sale at the London Tavern, yesterday, at which the following shares were sold:—40 East Gunnislake and South Bedwell, 3s.; 20 East Grenville, 3s.; 10 Wheal Chiverton, 5½/-; 15 Chiverton Moor, 4½/-; 5 West Chiverton, 6½/-; 4 South Tolgus, 20s.; 5 Clifford Amalgamated, 7½/-; 50 Wheal Crebore, 8s.; to 10s.; 15 West Caradon, 4½/-, 5/-; 100 Cardiganshire Consols, 18s.; 25 North Bassett, 1s.; 90 Caldebeck Fells, 25s.; 20 Par Consols, 1s.; 15 Polcarne, 4s.; 11 Craddock Moor, 20s.; 10 East Lovell, 5s.; 1 East Bassett, 12s.; 30 Sitherby Wheal Metal, 4s.; 4 Wheal Grenville, 10s.; 10 Gonanema, 2s. 6d.; 15 North Treskerby, 2½s.; 1 South Cadron, 31s.; 50 Prince of Wales, 2s.; 20 Roynton Tin, 1s.; 5 Bryn Gwilog, 10s.; 10 West Wheal Kitty, 10s.

FREEHOLD LAND AND BRICK-MAKING COMPANY.—At the adjourned general meeting, on Saturday (Mr. J. B. Hartwell in the chair), the report of the directors and balance-sheet was received and adopted. During the proceedings the manager gave a detailed description of the property, stating that up to the present time a large amount of money had been expended in preparatory works. Upon the property there were two effective brick-making machines in full operation—one, known as Clayton's, capable of making 16,000 bricks per day, and the other as Oates', capable of making 7000, in addition to which there were large numbers of bricks being made by hand. The embankment around the property—an expensive work—had been completed, and the quay, capable of receiving three barges, was in course of construction. At the present time there were between 1,000,000 and 2,000,000 bricks upon the property, and upwards of 900,000 ready for market. The operations were being prosecuted with the utmost vigour, and henceforth the whole of the expenditure would be incurred in the manufacture of bricks, the result of which could not fail to be a progressively satisfactory profit to the shareholders. It was further mentioned that the clay was far superior in quality, and of much greater depth than that stated in the prospectus; and that there was sufficient ground now excavated to make at least 1,000,000 bricks. The directors state that the future of the company can be predicted with unerring certainty—there are all the elements of a great success. It is not necessary, however, to invite the shareholders to look forward in a vista of bright but possibly deceptive hope; they are requested to direct their attention to actual work and appropriate results, and to reason from these as to what may and can be done hereafter.

ROYAL INSURANCE COMPANY.—The annual meeting of this company was held on Friday last, when a report was presented, from which we gather the following facts and figures:—During the year 1865 the fire losses sustained by the company amounted to 318,946/- 0s. 6d., or nearly 77 per cent. of the premiums received. Although this is above the average, the company has progressed satisfactorily, as shown by the returns of duty published by Parliament, which exhibit the largest increase the company has ever experienced. The total net amount of fire premium for the year, after deducting guarantees, is 414,733/- 18s. The life branch has met with unchecked success, the life and annuity funds having increased by 103,146/- 7s. 3d. During the year the company has granted assurances for 886,663/- 7s. 8d., an amount nearly double that in 1860. The directors propose a dividend of 3s. per share, and a bonus of 4s. per share, making 7s. per share, free of income tax. This leaves a substantial credit balance of 62,076/- 9s., besides the reserve fund, which, with the year's augmentation, now amounts to 116,913/- 2s. 10d.

MERSEY STEEL AND IRON COMPANY.—At the second meeting of shareholders, held in Liverpool on Thursday, Mr. T. B. Horsfall, M.P. (the Chairman) stated that the result of the last year's working had been unsatisfactory. The first seven months were unremunerative, in consequence of the iron trade not having recovered from the depression induced by the American war, and during the last quarter the strike among the workmen had seriously impeded the execution of orders. Now, however, the strike was over, and there was a prospect of improving business. There was no reason why in the future the concern should not be, as it had been in the past, highly profitable. No dividend was declared for the year, as the balance, after paying current expenses, did not exceed 275/- This was proposed to add to the reserve fund, which would then amount to 3202/- The report was adopted, the retiring directors, Messrs. T. B. Horsfall, M.P., J. C. Ewart, and G. H. Horsfall, re-elected, and Messrs. H. Banner and Son appointed auditors for the ensuing year, at a salary of 150/-

THE RAILWAY SYSTEM OF THE WORLD—TESTIMONIAL TO MR. WILLIAM HENRY JAMES, C.E.—In recognition of his invaluable and unrequited services in connection with the founding and establishment of our magnificent Railway System, particulars of which services may be seen at the Mining Journal office, where any donations will be received, in postage stamps or otherwise, on his behalf, and acknowledged in future Journals. Mr. James and his family being at the present moment in great distress, solely arising from the unexpected failure (considerably in his debt) of an eminent engineering firm, and as a consequence the seizure and sale of all his furniture and other effects, under execution for rent and taxes. See the Mining Journal of Aug. 4, under the head "Earnest Appeal for W. H. James, C.E., the Railway Pioneer," by Capt. R. L. Milne.

SEQUELIN OIL COMPANY (Limited).—A petition for winding up this company by the Court of Chancery has been presented to the Lord Chancellor by Messrs. S. Gardiner, of Bellevue-cottage, C. E. Mackintosh, Florence-road, and T. J. D. Mackintosh, Amersham-park, New Cross, carrying on business as engineers and boiler-makers at Railway Foundry, New Cross.

CLEVELAND IRON COMPANY.—A dividend of 10s. in the pound has been declared by Mr. F. Whitney, as official liquidator un-

water, but not the least degree of plasticity will appear. Pounded brick or pottery, for instance, can never be moulded. In the manufacture of crucibles, a portion of the materials used must be burned clay or old crucibles pounded up. This material, mixed with about two-thirds its bulk of raw or unburned clay, is rendered sufficiently plastic for the purpose. The presence of a portion of unburned clay is required to prevent them from cracking when exposed to the high heat of the furnace. The presence of iron pyrites is a fatal objection to use of any clay for crucibles. The pyrites are readily decomposed by the gases in the furnace, leaving the crucibles porous, and, of course, useless. The quality of a fire-clay in reference to its fitness for crucibles or fire-brick may be quite satisfactorily tested by thoroughly kneading a small quantity, and moulding it into such a shape as will present sharp edges. These pieces, when thoroughly dry, should be encased in a covered crucible, and submitted to a high heat in a blast-furnace. If the edges continue sharp and unchanged the material may be considered good; but if they are much rounded, that may be looked upon as an evidence of incipient fusion; if they are melted the clay is, of course, worthless. With a little practice, experiments in this manner may be made very satisfactory and reliable. Never build a furnace of untried material. The non-observance of this simple precaution has cost thousands of dollars in California.—*Mining and Scientific Press.*

UTILISATION OF BLAST-FURNACE SLAGS.—Amongst the many propositions for turning the vast accumulations of slags to commercial advantage, probably that for employing them, after proper pulverisation, as a substitute for emery is the most likely to prove successful. The ground slag is called "metalline," and can be very readily sold at about one-fifth the price of emery, to which for many purposes it is fully equal.

CHONTALES GOLD AND SILVER MINING COMPANY.—The advices by the last mail show that the mines are being actively opened out, the machinery still moving forward, the staff shaking down into a little more comfort, and order and regularity more established. We are of opinion that the greater part of the rumours which so suddenly and unfavourably affected the market value of this property a month ago arose from injudicious operations, upon insufficient grounds; and although some errors may have been committed in setting to work the wheels of this large concern, yet we have no doubt the machine will soon be set right, and fair and reasonable results be achieved, if due time is allowed to do all that is required to attain it. It is to be regretted that on one side over-sanguine friends inflated themselves and the public with unreasonable expectations; whilst others, alarmed at a cloud of dust, raised by party ebullition, lost both confidence and judgment. The fact is that, so far as we can learn, there is nothing yet to create alarm: on the contrary, the reports give evidence that a great deal of work has already been accomplished. These mines, in a primitive country, where everything has to be done, under service of difficulty, to put them in working order, will require time before regular returns should be expected. Nevertheless, if we judge rightly, there appears to be every probability that some remittances may yet be made before the year is out. The directors are giving proof of their watchful care that everything should go right at the mines. We learn from authority that by the packet which sailed yesterday, the secretary, Mr. Truran, accompanied by Captain Hill, Royal Navy, have been sent out specially to examine and correct any existing abuses, to organise a good working management, and to regulate the affairs upon the soundest financial principles. Measures taken so promptly and efficient augur well for the government of the property.

THE PESTARENA GOLD MINING COMPANY.—The directors have received 816 ozs. of gold, the produce for June and July.

BOTALLACK ACCOUNT was held this day (Wednesday), and, in spite of general depression, presented some cheerful features. The costs for three months are £510, 10s. 5d., and the credits £5281, 8s. 9d., leaving a credit balance of £7, 18s. 6d. Add this to a former balance of 7961, 10s. 5d., and there is a sum to the credit of Botallack of £14, 8s. 9d. The copper sold for the quarter realised £1581, 11s. 9d.; there were sundry credits, £61, 17s.; and the tin, credited but not sold, is £4300. The adventurers having resolved to withhold their rent for a time from the over-supplied market. A large number of shareholders and visitors dined, and all seem resolved to cheer and support the purser and agents. Some very interesting speeches were made by the purser, by Mr. Bond (of the firm of Vivian and Younger, metal brokers), and by Capt. Henry Boyns of Botallack. Botallack has lost by emigration nearly every miner who was on its staff 18 months ago, a period when the agents were told they must meet adverse circumstances; yet, with new hands, and a price for metal which has ruined many mines, it has given a profit of 22%, and increased its balance 50%. During the past quarter nearly half the men have been engaged in opening up new ground. The substance of the speeches of the purser and Mr. Bond—the former speaking from information direct from the East Indies, and the latter from the tone of the metal market generally—was that brighter days are at hand for tin and copper.

THE TIN MARKET, AND STATE OF THE MINING DISTRICTS.—During the past week no alteration that we can hear of has taken place in the price of tin, so far as the standards for tin ore are concerned. During the past three or four days foreign tin in the London Market is reported to be rather higher in price and demand good; especially in the tin-plate trade the sales are reported to be exceedingly brisk. There can be no doubt that for the past three weeks smelters have been most ready, and even anxious, to advance their price for tin ore, but their state that the discount market, and the state of the money market generally, is dead against them. Thus the anxious miner is weekly disappointed, and in vain waits for a relief from his miseries. During the past week one of our old-standing mines in the St. Just district has succumbed to the existing crisis. Speare Consols; and all we can say is the adventurers deserved a far better fate. We know of no mine in the western district where the shareholders have more nobly responded to the calls continuously made upon them, and the turnover expansion has been conducted on the most liberal scale. For several years under the proprietorship of the late Mr. Richard Pearce, this mine yielded dividends to the amount of 10,000/- to 12,000/- per annum. Five years ago the very productive Speare Lodge fell off in value, and the mine gradually became a losing one. During the two years ending June last the mine has been worked at an annual loss of about 2000/-, or an average loss of about 170/- monthly. For the quarter ending Jun. 30 last there was a loss of upwards of 400/-, and at the special meeting, held on Friday last, it was unanimously resolved to suspend; so that, on Saturday last, all the workpeople were discharged who could be at once dispensed with. The machinery on the mine comprises one 24-in. cylinder pumping engine and an 18-in. winding-engine, and the remainder of the machinery is of the most complete description, with pitwork to the 130 fm. level below the adit. The whole will be offered for sale. Another instance of the patient endurance and submission of the shareholders to continuous calls to the tune of about 25,000/- may be cited in the instance of Pendene Consols Mining Company. At their quarterly meeting, held on August 7, they showed a loss on the three months' working of 2000/- A further call of 1000/- was made. The works and machinery of the mine are universally admitted to be laid out on the most liberal scale; and several points of considerable interest are still being pushed on in the underground operations, and the adventurers richly deserve a prize. The carriers throughout the Western District have submitted to reductions in their rates for carriage of coals, timber, and ore. This is only what might be reasonably expected at such a time as the present. The most formidable appearance of a stoppage in the Eastern District, yet announced, is the case of that immense concern the Great Wheal Busy United Mines, at Chacewater, on which upwards of 100,000/- has been called from the adventurers. It is said the machinery alone cost 50,000/- All the tutwork operations were suspended 10 days since, and a special meeting of the shareholders is called this week to consider on any further prosecution of the mine. It is said that if these mines are suspended it will, probably, throw upwards of 1200 hands out of employment.—*Cornish Telegraph.*

THE BRITISH ASSOCIATION.—The 36th annual meeting of the Association will open in Nottingham on Wednesday next, on which occasion the financial address will be delivered in the Theatre Royal by the President, Mr. W. R. Grove, Q.C., F.R.S. The different sections will assemble in the rooms appointed for them for the reading and discussion of reports and other communications on the 22d to the 25th inst. The sections include mathematical and physical science, chemical science, geology, biology, geography, and ethnology, economic science and statistics, and mechanical science. To each section a separate president of eminence is appointed. On the 23rd there will be a *séance* at the Working Men's Exhibition Building, which has been decorated for the purpose. On the evening of the 24th, Mr. Huggins will deliver in the theatre a discourse on the results of Spectral Analysis applied to the Heavenly Bodies. On the 25th there will be excursions to places of interest in the districts, and in the evening a grand complimentary concert. On the evening of the 27th Dr. Hooker will deliver a discourse on Insular Flora, and on the evening following there will be another *séance* in the Exhibition Building. On the 29th the concluding general meeting will be held in the Guildhall, and on the 30th there will be further excursions into the country, which will close the proceedings. On the 29th the Government inspection of the Robin Hood's will take place in Bertwood-Park, near Nottingham, the seat of the Duke of St. Albans, the hon. colonel of the regiment, who has intimated his intention of giving a military festival at the close of the review. Report says that the Prince of Wales will be present. The vice-presidents are the Lord-Lieutenant of Shropshire, Leicestershire, and Nottinghamshire; the Right Hon. J. E. Denison, M.P., the Speaker of the House of Commons; Messrs. W. F. Webb, of Newstead Abbey; Thomas Graham, D.C.L.; Joseph Hooker, M.D., Master of the Mint; John Russell Hind, F.R.S., the celebrated astronomer, who is a native of Nottingham; and our intelligent townsmen, Mr. Thomas Close. The general secretary is Mr. Francis Galton, of Knightsbridge, London; the assistant general secretary, Mr. George Griffith, of Oxford; the local secretaries, Dr. Robertson, Mr. E. J. Lowe, and the Rev. J. F. McCallan; and the local treasurer, Mr. Ichabod Charles Wright.

FIRST USE OF COAL.—The Belgians claim to have been the first to discover the use of coal; and this discovery, they say, was made by one Huilus, a blacksmith, of the village of Plenevaux, near Liege. In the year 1040, from whose name they derive the word "houille." Coal was first used as fuel in London in the latter part of the 13th century; but the smoke was considered so injurious to the public health that Parliament petitioned King Edward I. to prohibit its burning, an intolerable nuisance. He complied, and issued his proclamation against it. The most severe measures were then employed to abolish its use—fines, imprisonment, and the destruction of furnaces and workshops where it was used.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending August 12 was 11,921L 16s. 8d.

IMPORTANT TO CAPITALISTS AND MINING COMPANIES.—The ADVERTISER, who is a Cornish Mining Captain of 40 years' experience, both in England, Wales, Ireland, France, and Italy, and now resident in the latter country, is OPEN to an ENGAGEMENT to INSPECT MINING PROPERTIES. The Advertiser is also in possession of, and acquainted with, several VALUABLE PROPERTIES, containing lodes of GOLD, SILVER, LEAD, COPPER, and NICKEL ORES, which he is authorised TO DISPOSE OF. He will be happy to afford information on all points connected with mining. All applications to be addressed Captain JOHN KESSELL, Burgofrancio, Ivrea, Italy; or Scopello Mines, Scopello, Val-Sesia, Piedmont.

A FORGE AND MILL MANAGER WANTED at a large IRONWORKS in SOUTH WALES.—Apply by letter, in own handwriting, and stating where the last situation was held, with references, to No. 64, Post-office, Newport, Monmouthshire.

WANTED, an EXPERIENCED MAN as MINING AGENT to a GENTLEMAN in YORKSHIRE. The mines include LEAD, IRON, STONE, and MARBLE. He will also be required to receive the rents and keep the general accounts of a large estate. A Married Man preferred, and good references expected.—Address, "J. Y.", Bewerley Hall, Pateley Bridge, Leeds.

WANTED, by an English Gentleman at present in the United States, a SITUATION as an ASSAYER or SECRETARY to a GOLD or SILVER MINING COMPANY in VIRGINIA, NEVADA, or CALIFORNIA.—Address, "E. D.", care of Prof. Chandler, School of Mines, Columbia College, New York.

FOREIGN GOLD SETT.—**WANTED,** by the advertiser, about to form a public company, a GENUINE GOLD SETT. It must bear a strict investigation, and be properly authenticated. All answers must contain a full description, also particulars as to title and price required. No answers will be entertained unless giving the required information, and no fancy price will be given.—Address, "Forbes," Deacon's News Rooms, Leadenhall-street, London, E.C.

TO ALL INTERESTED IN MINES.—**A METALLURGIST**, having discovered a cheap and easy method of extracting the precious metals from minerals, clays, &c., will, in order to further test the practicability of the discovery, ANALYSE, FREE OF CHARGE, ANY MINERALS, &c., supposed to contain such, upon a sample of not less than 7 lbs. weight (carriage paid) being sent to Messrs. ANDERSON, BAKER, and Co., 66, Basinghall-street, London, E.C.

THE METAL TRADE.—**A WELL-ESTABLISHED HOUSE** in AMSTERDAM, having good connexions with Metal Dealers and Manufacturers in Holland, would be glad to UNDERTAKE the SALE OF METALS, MACHINERIES, and TOOLS, upon commission, for first-rate houses in England. References of the highest respectability are offered.—Address, "H. H.", prepaid poste restante, Amsterdam.

NEW ZEALAND MINING.—An M.E., of great practical experience, is ABOUT TO PROCEED to NEW ZEALAND to SURVEY and REPORT on some MINERAL PROPERTY, and is OPEN to OTHER ENGAGEMENTS of a similar nature, or to survey any mines periodically, and to audit accounts. First-class references given and required.—Address, "M.E.", MINING JOURNAL Office, 26, Fleet-street, E.C.

A PROFESSIONAL MAN, being about to PROCEED to the SOUTH of EUROPE, and who intends to SETTLE in ITALY, will be happy to INSPECT and REPORT on MINING PROPERTIES.—Address, "Geologist," MINING JOURNAL office, 26, Fleet-street, London, E.C.

A PARTNER, OR PARTNERS, WANTED, who can command £5000, to JOIN in a COLLIERY of the best house coal in SOUTH WALES, for the further developing the workings, and other purposes. The small coal is excellent for coking.—Apply to "A," MINING JOURNAL office, 26, Fleet-street, London, E.C.

TO COLLIERY PROPRIETORS.—**WANTED**, by a young man thoroughly conversant with coal mines, EMPLOYMENT as BOOKKEEPER, or as ASSISTANT MANAGER.—Address, Mr. SAMUEL POINTON, Openshaw, near Manchester.

TO COLLIERY PROPRIETORS, FIRE-CLAY CONSUMERS, CAPITALISTS, AND OTHERS.—**WANTED**, a PARTNER (active or otherwise) to TAKE a THIRD or HALF-SHARE in a FREEHOLD MINERAL PROPERTY in STAFFORDSHIRE, consisting of 23 acres of mines, and 14 acres of very valuable surface.

There is an excellent COLLIERY PLANT, consisting of a 40 horse power WINDING ENGINE, with pump and gearing, all complete. Also, three 7 ft. 6 in. diameter shafts, two of which are down to the white ironstone.

The whole area contains the real, bona fide, and genuine STOURBRIDGE FIRE-CLAY, 3 ft. 6 in. thick, already proved and fully tested to be quite equal in character and property to any in the whole of the Stourbridge district, of which it forms a part, being a continuation (without interruption) of the main old Stourbridge seam. The royalty value of this clay is £1500 per acre. Twenty acres of Brook Coal and Blinds Ironstone is in the solid, the royalty of which is £200 per acre. Fifteen acres of Heathen Coal and Gubbin Ironstone is likewise in the solid, the quality and yield of which is unsurpassable.

The Thick Coal, which is 10 yards thick, of excellent quality, level, and free from spoil, has been but partially worked. There is a considerable quantity yet in a maiden state, besides the usual ratio of ribs, pillars, and remaining portions of unbroken coal.

Several excellent and valuable ironstones are all in the solid. There is 10 acres of surface Red Brick Clay, 5 yards thick, and of rich and mellow cut.

The only object of the proprietors (two in number) in seeking a partner is to fully develop and bring their truly genuine fire-clay into the market.

A railway runs through the estate, and canal accommodation is within very easy access. The surface and situation is most admirably adapted for the erection of extensive fire-brick works, and as a whole forms one of the most desirable objects for investment in the Midland Counties. The royalty value of mines yet unopened amounts to £50,000. Being truly bona fide and genuine, none but principals, or their solicitors, can be treated with.

Terms for the third or half-shares, and all essential particulars, obtained on application to Mr. JEREMIAH SKIDMORE, Jun., Mining Engineer, Dennis Park, Stourbridge.

THE MINING JOURNAL.—The ADVERTISER WISHES to RECEIVE a COPY of the MINING JOURNAL, posted weekly, either on Monday, or Tuesday evening at the latest, for which he is willing to pay HALF PRICE.—Address, Mr. B. J. CRISP, Harleston, Norfolk.

NOTICE.—Notice is hereby given, that the COAL BUSINESS carried on for many years by Mr. JOS. DUNSTAN will, on and after the 1st March next, be CONTINUED under the FIRM of J. DUNSTAN AND CO. To the above will be ADDED the BUSINESS of GENERAL MERCHANTS, AUCTIONEERS, MINE BROKERS, and SHAREDEALERS, MINE PURSERS, COMMISSION AGENTS, ACCOUNTANTS, &c.

J. DUNSTAN and Co. hope, by strict application to all matters of business entrusted to their care, to merit a liberal share of public patronage.

Truro, January 24, 1866.

TO OWNERS OF PEAT LANDS.

M. F. H. DANCHELL, C.E., begs to offer the benefit of his extensive experience in UTILISING PEAT LAND, and to call the attention of the above parties to his IMPROVED PATENT PROCESS for UTILISING and WORKING PEAT, a description of which was read before the British Association in 1865 (*vide report*).

Mr. F. H. DANCHELL will be glad to reply to any communication on the above subject addressed to him, care of Messrs. James Scott and Son, 10, Tib-lane, Cross-street, Manchester.

WANTED.—**WANTED TO PURCHASE**, a GOOD SECOND-HAND DOUBLE-ACTING ROTARY CONDENSING ENGINE, with double beat, valves, and tappet motion, cylinder about 25 inches diameter, stroke about 5 feet, wrought-iron crank shaft.—Address, stating maker's name and length of time in use, with full particulars, to WILLIAM BERET, 60, North Quay, Douglas, Isle of Man.

STEAM ENGINES FOR SALE.—60-inch PUMPING ENGINE, equal beam, 10 ft. stroke, with TWO 10-ton BOILERS; 36-in. CYLINDER SINGLE-ACTING ROTARY ENGINE, 14 ton fly-wheel, with 9 ton BOILER; 18-inch CYLINDER DOUBLE-ACTING ROTARY ENGINE, with drawing gear, whim cage, and 7-ton BOILER, the whole in good condition, to be seen at Kelly Bray Mine, Callington, Cornwall.—For further particulars and price, apply to Mr. EDWARD KING, 22, Austinfriars, London.

FOR SALE.—**A SECOND-HAND PORTABLE OR TRACTION STEAM ENGINE**, of 7-horse power; has reversing gear; with or without pit winding drum.—Apply to BARROWS and CARMICHAEL, Portable Engine Works, Banbury, Oxon.

PORTABLE STEAM-ENGINES (SECOND-HAND) FOR SALE.—TWO 20-horse, by ROBY, of Lincoln; TWO 10-horse, by CLAYTON, SHUTTERWORTH, and Co., and a 6-horse; also a 10-horse RETURN FLUE ENGINE; and also FOUR OTHER ENGINES, out of repair, which will be disposed of at a moderate price.—For particulars, apply to MEAD and Co., No. 2, King's Bench-walk, Temple, E.C.

STEAM BOILERS.—HIGH-PRESSURE, WITHOUT RISK OF EXPLOSION.—JORDAN'S PATENT COMBINATION BOILERS are six times as strong as ordinary boilers; they are composed of identical parts or powers, which are proved by the makers, to three times the working pressure, and are not loaded to more than a twentieth of their ultimate strength. They can be conveyed to, and erected in any situation without a crane. They occupy smaller space than any other boiler of equal power; are made without rivets; steam rapidly, and with great economy of fuel; and afford the greatest facilities for cleaning. They are now manufactured by the Sandicroft Foundry and Engineering Works Company, Chester; Messrs. Hayward, Tyler, and Co., 84, 85, Upper Whitecross-street, London; and by the Patentee, Milton Works, South Lambeth-road, London.

For descriptive notices, see *Engineer*, May 25; *Mechanics' Magazine*, May 25; *Mining Journal*, July 28.

Royal Arsenal, Woolwich—Sale of Stores.

BY ORDER OF THE SECRETARY OF STATE FOR WAR.

M. R. GEORGE SPILLMAN WILL SELL, BY PUBLIC AUCTION, at the Royal Arsenal, Woolwich, by order of the Secretary of State for War, on Monday, September 3, 1866, at Eleven o'clock in the forenoon precisely, the following STORES:

PAIR OF ENGINES.	MACHINERY.
ONE IRON BOILER.	RESIN.
STEEL.	FOUNDERS' ASHES.
SERGE CUTTINGS.	LEATHER.
HARNESS.	JUNK.
CANVAS.	WOOD.
MIXED METAL.	WHEELS.
SCRAP IRON.	FILES.
LEAD ASHES.	ZINC AND ZINC ASHES.
NUMAHS.	HAY.

The lots may be viewed at the Royal Arsenal, Woolwich, from Ten to One o'clock, and from Two to Five o'clock, on the three working days previous to, and on the morning of, the day of sale; and catalogues may be obtained at the War Office, Pall Mall; at the Tower; and at the Royal Arsenal, Woolwich.

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL.

NOTICE IS HEREBY GIVEN that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before Monday, the 20th of August, 1866, to RECEIVE PROPOSALS, in writing, sealed up, from such persons as may be willing

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, AUG. 17, 1866.

COPPER.	s. d.	IRON.	Per ton.
Best selected .. p. ton	84 0 0	Bars Welsh, in London	15 0 7 0 0
Tough cake & tile ..	81 0 0	Ditto, to arrive	15 0 7 0 0
Burnt Burra	85 0 0	Nail rods	7 10 0 9 5 0
Copper wire .. p. lb.	0 11 6	" Staffd., in London	10 0 8 17 5
Do. tubes ..	0 12 -	Bars ditto	10 0 10 0 0
Sheath. & bolts p. ton	80 0 0	Hoops ditto	9 5 0 10 0 0
Bottoms ..	91 0 0	Sheets, single	10 0 11 0 0
Old (Exchange) ..	72 0 0	Pig No. 1, in Wales ..	4 5 0 4 10 0
BRASS.	Per lb.	Refined metal, ditto ..	4 0 5 0 0
Sheets	per lb. 9d.-	Bars, common ditto ..	6 0 6 6 5 0
Wire	" 8 1/2d.-	Do. mch. Tyne or Tees	7 10 0 -
Tubes	" 9 1/2d.-	Do., railway, in Wales	15 0 6 5 0
Yellow Metal Sheathing .. p. lb.	8 1/4d.	Do., Swed., in London	10 0 11 0 0
Sheets	" 8 1/4d.	To arrive	11 0 0
SPELTER.	Per ton.	Pig, No. 1, in Clyde ..	2 11 6 2 16 6
Foreign	19 2 6-19 10 0	Do. Tyne or Tees	2 9 6 -
To arrive	19 10 0	Do. Nos. 3, 4, f.o.b. do.	2 6 6 2 7 0
ZINC.		Railway chairs	5 10 0 5 15 0
In sheets	27 0 0 -	" spikes	11 0 12 0 0
TIN.	Per ton.	Indian Charcoal Pigs,	
English blocks ..	85 0 0 -	In London p. ton ..	7 0 0 7 10 0
Do., bars (in barrels)	86 0 0 -	STEEL.	Per ton.
Do., refined ..	88 0 0 -	Swed., in kgs.(rolled) ..	14 0 14 10 0
Barrels ..	81 0 0 -	(hammered) ..	16 0 16 10 0
straths ..	77 0 0 -	Ditto, in faggots	16 0 17 10 0
TIN-PLATES.*	Per box.	Ditto, sheet	21 10 0 21 15 0
IC Charcoal, 1st qua. 1 8 6-1 18 0	19 15 0 -	Ditto, red lead	23 10 0 24 0 0
IC Ditto, 1st qua. 1 14 6-1 19 0	Ditto, white	27 0 0 30 0 0	
IC Ditto, 2d quality ..	1 6 6-1 8 0	Ditto, patent shot	23 15 0 24 0 0
IC Ditto, 2d quality ..	1 12 6-1 14 0	Spanish	19 5 0 -
IC Coke	1 3 0-1 6 0	* At the works, ls. to ls. 6d. per box less.	
IC Ditto	1 9 0-1 12 0		
Canada plates, p. ton ..	13 10 0 -		
Ditto, at works	12 10 0 -		

* At the works, ls. to ls. 6d. per box less.

REMARKS.—The long-anticipated reduction in the Bank rate of discount has at length taken place, the directors of the Bank of England having announced, on Thursday, a reduction from 10 per cent., at which it had remained since May 12, a period of three months, to 8 per cent. The time during which the higher rate has lasted has been quite unprecedented, and has caused serious inconvenience and loss to commercial operators, and been the means of restricting business very considerably, and has produced a depression in the Metal Market very detrimental to the interests of all concerned. The reduction, therefore, to 8 per cent. has been received with the greatest satisfaction by all engaged in commerce, as it will tend to produce a much more favourable state of things; and we may now very fairly hope to find that a great improvement will take place in business, and may look forward to an active autumn trade. The metal market will largely participate in the favourable change which will take place, and we fully anticipate that we shall soon be enabled to record a return to activity and vigour; orders which have been kept back will, no doubt, be given out, and we may expect that as the Money Market becomes still easier, which we may now calculate will gradually be the case, that speculation, which has so long entirely ceased in the metal trade, will be resumed; thus we anticipate that the entire position of the metal trade will be improved and advanced.

COPPER.—The market for this metal was becoming decidedly firmer before the reduction in the Bank rate, but there is now no doubt that a considerable improvement will take place, although as yet there has been hardly sufficient time for the improvement to be developed. It is now quite impossible to buy at the prices which were ruling a few days since, and operators who are desirous of purchasing should not delay in giving out their orders at once, or they may find themselves obliged to pay a considerable advance upon present prices.

IRON.—In Staffordshire the partial improvement in the demand continues, more orders are given out by merchants, whose stocks are evidently low, and who are, no doubt, influenced by the anticipated peace in Germany, the withdrawal of the Tariff Bill in the United States, and the wages dispute in the Cleveland iron district, which last will, if it should be prolonged, soon influence the supply of iron. The works are generally very slack, and the recent accession of orders has hardly served to do more than prevent the depression getting worse. The blowing out of blast-furnaces, which commenced a month ago, has been extended, and the production of pig-iron has been considerably reduced, though stocks are still rather accumulating. In Welsh the trade still continues depressed, but there are indications of some improvement. The complete re-establishment of peace is looked forward to shortly, and should this be the case a good many continental contracts are expected to find their way to South Wales, Russia, and the other North of Europe markets, are considerable customers, and large shipments are being made to Cronstadt. There is a better enquiry from the United States, and as the Triff Bill has been postponed until December, it is probable that there will be a fair trade with America in the interval. Advices from the East show no material change. At nearly all the works reductions are made weekly in the number of hands employed. Pigs sell slowly, but a better demand is expected consequent upon the strikes in the North. In Swedish iron the market remains much the same as last week. In Scotch pig-iron prices have only slightly fluctuated during the week, the last prices quoted from Glasgow being 5ls. 6d. cash.

LEAD.—The market is still steady, a fair demand continues for America, and prices remain as last quoted.

TIN.—A slight improvement has taken place in foreign, small parcels of fine square Straits having been sold at 77l. cash. Since the reduction in the Bank rate, however, a still better feeling has arisen, and holders are not disposed to part with their parcels at present prices, as they look with confidence to a considerable improvement in the market, and better prices ruling ere long.

SPELTER.—At the commencement of the week sales took place on the spot at 19l. 10s., but more recently business was done at 19l. on the spot. Since the alteration in the Bank rate, however, an improvement of about 2s. 6d. has occurred, and sales have been effected at 19l. 2s. 6d. on the spot, and 19l. 10s. prompt, one month.

ZINC.—A reduction of 20s. per ton has been announced, present price being 27s. per ton.

TIN-PLATES.—There is a fair enquiry, and the works are moderately employed.

STEEL and QUICKSILVER without alteration.

BIRMINGHAM, AUG. 17.—Rylands' "Iron Trade Circular" says—The iron trade revives at the reduction of the Bank rate. Some demand for pigs, but manufactured iron is hesitating, through the unexpected passing of "a Revised Tariff Bill" in the United States.

THE COPPER TRADE.—Messrs. Vivian and Younger, under date Aug. 17, write:—The mail from Chili, which was delivered on Monday, advised seven charters, the contents being estimated at 2000 tons of fine copper; but it is considered that the advices generally are favourable for copper. The demand is increasing, and with easier money we expect to see higher prices paid shortly. Smelters are declining to sell tough at their quotations, but the enquiry for manufactured is still very limited. Business has been done in Chili bars at 77l. 10s. for arrival.

THE COPPER TRADE.—Mr. Pitcairn-Campbell (Liverpool, Aug. 15) writes—An active demand continues for English manufactured copper, consumers being evidently inclined to go more into stock at present rates, and the tendency of the raw material is towards higher prices. The Continent also continues to take bars, the stocks of which now are in a comparatively small compass. Shipments, however, from the West Coast continue on a fair scale, the charters by the mail of the 3d ult. representing during the fortnight 1900 tons of pure copper to this country. Sales since my last have been—

Aug. 4.—7 tons ore, on spot here, ex T. S. Stowe £ 0 14 0 per unit.
Aug. 5.—290 tons regulus, on spot here, ex Calabar 0 14 0 per unit.
Aug. 5.—53 tons regulus, on spot here, ex Malpa 0 14 0 per unit.
Aug. 6.—522 tons regulus, on spot here, ex Florence Livia 0 14 0 per unit.
Aug. 7.—255 tons bars, on spot here, ex Pride of the Thames 74 0 0 per ton.
Aug. 7.—150 tons regulus, at Swansea, ex Clarendon 0 14 0 per unit.
Aug. 9.—255 tons bars, on spot here, ex Pride of the Thames 74 0 0 per ton.
Aug. 9.—200 tons regulus, on spot here, ex Alice 0 14 0 per unit.

Stocks of copper produce (Chilian and Bolivian) in first and second hands likely to be available—

Ores. Regulus. Bars. Ingots. Barilla, Liverpool 2085 2605 1500 623 68

Swansea 8376 7406 399 —

Arrivals from West Coast, S.A., during the past fortnight:—Zoroya, Chala, 210

tons of ore; at Swansea, none. Quotations are 14s. 3d. to 14s. 6d. for ore and regulus, 74l. to 75l. for bars, 78l. 10s. to 79l. for ingots, and 16s. 9d. to 16s. nominal, for Barilla.

THE MINING SHARE MARKET has been more active this week, and a good amount of business transacted in Great Retallack, Prince of Wales, Chontales, Clifford Amalgamated, North Treskerby, and a few other mines. The Prince of Wales opened firmly at 27s. 6d. to 30s., and after fluctuating, as buying or selling orders appeared, leave off 20s. to 22s. 6d. The lode in the 45 fathom level east, as far as taken down, is looking well, and valued at 20s. per fathom, without any sign of the north wall; the 45 fm. level west is worth 2 tons per fathom. Great North Laxey, 32s. 6d. to 37s. 6d.; the reports here are very favourable. The 80 fm. level ends, just commenced, yield 1 ton of lead per fathom each, and the agent says the mine steadily opens out for a complete success in depth, and all that is possible is being done to hasten that result. Chontales leave off firm, at 2 to 2½, buyers. The advices by the present mail are favourable. Capt. Paul writes that part of the machinery went to work in July, and he hopes between this time and March next to send home 8000 ozs. of gold. West Seton, 100 to 110, nominal; at the meeting, on Tuesday, a dividend of 3½ per share was declared, leaving a balance of 342s. 11s. to the credit of the mine. The winzes and stopes are turning out 51 tons per fm., and the ends 8 tons. Wheal Seton, freely offered at 120. East Caradon, after being flat at 6s., sellers, advanced, on Thursday, to 6s. buyers. Chiverton Moor flat, at 4s., sellers; Clifford advanced to 7s.; Cook's Kitchen, 2 to 2½; East Bassett receded to 12s., sellers; East Carn Brea, 20s. to 22s. 6d.; East Grenville, 1½ to 2½ (call paid); Frontino, 6s. to 8s.; Great Laxey, 19 to 20. Great Retallack shares have been largely dealt in at prices varying from 10s. to 15s. The prospects here are very good. Great Wheal Vor very firm, at 18s. to 19s.; Marke Valley, 3½ to 3¾; North Treskerby in demand at 2½ to 2¾; Providence, 21 to 23; Tincroft, 7 to 8; West Caradon, 3½ to 4. Chiverton, 60 to 65; at the quarterly general meeting, held on the mine, yesterday, a dividend of 2s. per share was declared. Chiverton, 5½ to 6; Crebor, 8s. to 10s. (call paid); Mary Ann, 4 to 5; Trelawny, 8 to 9. Dolcoath meeting was held on Monday, when a dividend of 1s. per share was declared.

The market for mine shares on the Stock Exchange has during the week been without material change. West Chiverton, 62½ to 63; the quarterly meeting was held to-day, and a dividend declared of 2s. The report is highly favourable, more so than at any period of the mine's history. Chiverton, 5½ to 6; mine favourably reported on. Chiverton Moor, 4 to 4½. Great Laxey, 19 to 20; prospects very good. The general tone of the market is slightly less depressing for English mine shares than for some time past. In foreign mines there has not been much doing. Cobre shares close 2 to 3, Chontales ½ to 1 dia., Frontino ½ to 1 per share, Washoe Gold nominally 1 to 1½ per share; St. John del Rey, 4½ to 4½; Cape Copper flat at 1½ to 2 prem.; Capula Silver, ½ to 1; Port Phillip, ½ to ½; Don Pedro, 1½ to 3½ to 3½ prem.; Anglo-Brazilian, ½ dis. to par. Pessarena in demand at ½ dis. to par; the returns from this mine are now showing a considerable monthly profit.

At the Swansea Ticketing, on Tuesday, 900 tons of ore were sold, realising 7671l. The particulars of the sale were—Average standard, 82l. 18s. 6d.; average produce, 13; average price per ton, 8l. 10s. 6d.; quantity of fine copper, 117 tons. The following are the particulars of the sales during the past month:—

Date. Tons. Standard. Produce. Price per ton. Per unit. Ore copper, June 17. 1265 £ 89 8 0 8½ £ 5 8 10 12½ 10d. £ 64 1 0

..... 24. 2675 88 1 0 134 8 19 9 13 1 65 8 0

Aug. 14. 900 82 18 6 13 8 10 6 13 1 65 10 0

Compared with the last sale, and with the corresponding sale of last month, the standard is about stationary.

At the West Wheal Seton meeting, on Tuesday, the accounts showed a credit balance of 1542l. 11s. The profit on May and June working was 1214l. 4s. 1d. and a dividend of 1200l. (3½ per share) was declared. The amount of copper ores sold July 5 and August 2, to come to the credit of next account is 4215l. 3s. 6d. Captains Charles Thomas, Mahechi Bath, and John Jennings report that the tribute pitches are looking as usual.

At Dolcoath Mine meeting, on Monday, a dividend of 1s. per share was declared. The dressing costs of the ores of this mine have been reduced more than one-half by the employment of machinery.

At Wheal Seton meeting, on Wednesday (July 17), a profit was shown on the two months of 1737l. A balance of 4734l. was carried forward to the credit of the next meeting. It was resolved that, taking into consideration the present depressed state of the standard for copper ore, the agents be instructed to limit the sales of ores as near as possible to the actual cost for working the mine, and that the costs be reduced as much as possible.

At West Condurrow Mine meeting, on Tuesday, it was resolved no longer to prosecute the mine, and that a special meeting be called on Sept. 18. To meet the debit balance, a call of 5s. 9d. per share was made.

At North Grambler Mine meeting, on Aug. 11, it was resolved to suspend operations.

At New Crown Hill Mine general meeting, on Thursday (Mr. W. S. Sutton in the chair), the labour cost amounted to 581l. 9s. 5d., and the ore sold during the quarter realised 657l. 0s. 5d.; the cash balance on the quarter was 22l. 14s. 4d. A call of 1s. per share was made. The committee have advanced 3000l. on mortgage of Mr. Dyer's property, which secures to the company the right of the water-power for the next fourteen years. The agents' report will be found among our Mining Correspondence.

At Wheal Crebor general meeting, on Wednesday (Mr. J. Thompson in the chair), the accounts showed a credit balance on the quarter of 27l. 14s. 8d., and a balance of liabilities over assets of 514l. 2s. 3d. A call of 1s. 6d. per share was made.

At North Shepherds Mine meeting, on Aug. 9, it was resolved to suspend operations.

At North Grambler Mine meeting, on Aug. 11, the accounts showed a debit balance of 299l. 3s. 11d. A call of 1s. 4d. per share was made. The arrears of calls amount to 340l. 1s. 2d.

At East Gunnislake and South Bedford Consols Mines meeting, on Tuesday (Mr. James Greening in the chair), the accounts showed a cash balance in favour of the mine of 76l. 15s. 7d., and an estimated account of payments and receipts before the meeting in November showed an estimated debit balance of 630l. 3s. 3d. A call of 1s. 4d. per share was made. Capts. Wm. G. Gard and James Phillips say—"We fully believe the mine presents prospects equal to some of the best in Cornwall, and that we are in close proximity to points which will well repay both the perseverance and cost they have taken to reach."

At Great Wheal Busy special meeting, on Thursday, it was agreed to abandon Great Busy proper, but to continue operations at that portion of the seat known as Wheal Daniel.

At Hallenbeagle Mine meeting, on Thursday (Mr. Buckland in the chair), the accounts showed a debit balance of 1957l. 0s. 11d. A call of 1s. 6d. per share was made.

The Crown Preserved Coal Company (Limited) held their tenth ordinary general meeting at their office, the Old Hall, Liverpool, on Tuesday (Mr. Charles Holland in the chair), when the directors' report and balance-sheet, duly audited, were presented and adopted. After deducting the usual amount for depreciation, a dividend was declared at the rate of 8 per cent. per annum. The report states that "the Preserved Coal continues to maintain its superiority and the eminent position stated in former reports; and offers of orders still exceed the production." The cost of the raw material having considerably advanced again since Christmas, the directors have increased the price of preserved coal, although this applies principally to future deliveries. Several additions and improvements have been made in the hydraulic and other machinery, by which a portion of the works have been stopped for a period during the half-year, and this has tended to diminish the production and also the profits."

At the Worthing Mining Company (annual) meeting, on Monday (Mr. Cyrus Legg in the chair), the report of the directors was received and adopted. The quantity of ore raised in 1865-6 was 3133 tons, against 3400 tons in 1864-5. The company is financially better by 276l

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,

MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON AND CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and the state of the share market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON and CUELL have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar and honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON and CUELL, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years' active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of share dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are also daily asked their opinion of particular mines, as well as *recommending* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts; but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in rendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

"H. L."—We may shortly give some account of the mineral products of Portugal, particularly in reference to the concessions referred to.

"A SHAREHOLDER."—By no means sell.

"L. S. D."—You cannot avoid the call, and had better pay it. If you relinquish you will have to pay more than the amount of call, as it was made two months ago.

MINING, METALS, AND MINERALS—PATENT MATTERS.

By M. HENRY, Memb. Soc. Arts, Assoc. Soc. Eng.

The recently filed Applications for Patents and the recently published Specifications, though rather numerous, comprise very few inventions relating to the mining and metallurgical arts. It is, indeed, rather singular that among the late applications for Letters Patent are few improvements relating to the staple and prominent manufactures of the country, but several matters of an unusual and almost bizarre character. We rarely recollect noticing so many of this special nature in one patent list: for example—portable lanterns, instruments for ascertaining the temperature of hay-ricks and for taking samples from them, torpedoes, lanterns, printing on glass, hydrostatic scales for measuring loads of ships, awnings for garden-seats, musical instruments, and notation are among the articles for which patents have been recently sought. An application, accompanied by a complete specification, has been filed by H. J. BATCHELDER, of Massachusetts, under the somewhat comprehensive title of "a new and useful invention, having reference to the manufacture of horse-shoes, or various other articles"—a title which might certainly include any tangible object within the range of the manufacturing arts and products.—J. ROTHERY, of the Waterloo Main Colliery, near Leeds, has sealed his patent, No. 477, for machinery for cutting coal and other minerals, and in means for driving such machinery.—BANKART's specification, No. 2720, relates to an arrangement of furnace for calcining copper ore, in which the circumference of the calcining chamber is divided into twelve parts, each fourth part being a furnace, so that there are three calciners to each furnace. The party-walls are perforated, so that the heat may pass under the central calciner of the three. There are flues, which unite in the centre up-take or chimney, the gases and other volatile products of the ore are retained and treated by an arrangement of flues connected with a retort in the chimney, which terminates in a worm, furnished with cold water, so as to condense the products.—Mr. BESSERMEIER, whose name is so well known in the metallurgical world in connection with the numerous patents which he has taken out, and especially in respect of the celebrated process which bears his name, has specified a recent patent, No. 2832, for the manufacture of iron and steel, the claims of which, even in number, may be succinctly condensed into the following heads:—Firstly, the combined operation of melting in a cupola furnace of fluxes, pig-iron, or cast scrap-iron, alone or in combination, and puddling or partially puddling such molten metal by mechanical means or hand-slagging, and its conversion. In combination with grey carburets of iron, into malleable iron or steel by the Bessemer process; secondly, puddling or partially puddling fluxed iron, pig-iron, or cast scrap-iron, and its fusion in or admixture with molten crude iron or remelted pig-iron, for rendering the same more suitable for conversion into malleable iron or steel by the Bessemer process; thirdly, puddling or partially puddling iron in oscillating puddling chambers, heated by gas, coke, fuel, burning, a mode of conveying various fuel and atmospheric air to puddling-furnaces and the exit of the products of combustion by oscillating pipe; fourthly, melting molten carburets of iron with perfitting fluxes or matter in oscillating furnaces heated by gas or fuel, before converting carburets of iron, with or without another portion of carburet of iron not so treated, into steel or malleable iron; sixthly, melting fluxed iron, pig-iron, or cast scrap-iron by gaseous fuel in oscillating furnaces before purifying such metals by fluxes, by melting, pressing or consolidating granulated, or powdered, or partially puddled iron by rolls; eighthly, the use of oscillating gas puddling-furnaces, for making ordinary puddled or wrought iron; ninthly, reverberation and fusion of puddled or partially puddled iron in cupolas or blast-furnaces, such as a being granulated or puddled in balls, or more or less compressed or squeezed; also, the employment of fused metal alone or mixed with other portions of carburet of iron, for conversion into malleable iron or steel by the Bessemer process; tenthly, rebarboration and fusion of puddled or partially puddled wrought iron in reverberatory gas-furnaces, either alone or in combination with pig-iron or carburets of iron; and, eleventhly, employing carbonic oxide gas, in addition to coke or other solid fuel, in blast or cupola furnaces employed in rebarboring and melting puddled or partially puddled iron and scraps or skulls of Bessemer iron and steel.—NEWTON specifies, under No. 2796, an invention relating to mining-picks, communicated by the Washoe Tool Company of America:—here an elongated or elliptical eye or socket is used, the opposite sides being parallel to each other, the elongation being in the line of the axis, and the eye is claimed in combination with one or more projecting arms or bits, merging by curved lines into a socketed head; the object of the improvement is to make the pick of greater strength and solidity.—BERNARD's patent, No. 2774, relates to blasting and boring tools, in which is employed a metal bar, which is made at one or more parts of smaller diameter than at the ends, and explosive material or charges are placed at such smaller or contracted parts, and protected by waterproof coverings; the bar is placed in the orifice or blasting-hole, and the charge or explosive matter is ignited, preferably by electricity. Sometimes an expanding ring is used, and a conical surface, which is placed on a part of the bar attached to a parallel rod smaller than the outer part of the bar, which is made hollow, to receive the smaller rod, whereby the outer part of the bar is forced against the ring and collar, and thus acts as tamping. The invention also relates to a mode of placing over the tamping a movable weight, combined with a bar with stops, to retain the weight in a required position, so that several cartridges at various distances may be discharged. The cutting edge of the cutting or boring tools may be made with teeth at different angles at different parts of the tool. The inventor also describes constructing bevel or cutting edges of tools or chisels for working or cutting metal, stone, and other hard substances, by forcing them by impact or pressure into dies or matrices of V-shaped section, corresponding with the bevel of the tool, and the bevel is forced into a second V-shaped matrix, of less acute angle than the first matrix, so as to compress or consolidate the cutting edge of the tool, by making the metal more homogeneous at that part.

IMPROVED PUDDLING FURNACES.—An invention, the application of which results in the burning of the fuel much more economically than is done under the existing arrangements for carrying on combustion, has been provisionally specified by Mr. W. BEARDMORE, of Parkhead, Lanark. The furnace, whether used for puddling or re-heating iron, or placed beneath a boiler, consists essentially of a hollow trough, in which the fuel is placed, being covered over at the top, and having vertical or inclined fire-bars at the end, through which the air passes horizontally among the layers of fuel, and thus the combustion is maintained.

IMPROVED CALCINING FURNACE.—An improved calcining furnace has recently been put in operation in Nevada by Mr. CORRETT. The apparatus may be thus described. First, a cylindrical-shaped hearth of brick is constructed, with a furnace arranged as in the ordinary manner of a reverberatory furnace.

ROTARY ENGINES AND PUMPS.—An invention has been provisionally specified by Mr. CHATELAINE, of Lille, which consists in thus constructing rotary engines:—A cam-shaped block is fixed in the centre of a circular case, an aperture in the centre of the block gives passage to a shaft fixed on a disc piston carrying in slots sliding vanes; there is an inlet and outlet passage, and between them a curved guide is fixed on the inside of the edge of the case. There is a cover fitting tight to the case, and stuffing-boxes surround the shaft, both in the case and cover. Upon steam being admitted through the inlet passage its course is stopped in one direction by the end of the curved guide, and it acts upon such of the vanes as are protruded from the piston by the inner fixed cam-shaped block, and drives them as well as the piston round; as soon as each vane passes the outlet passage the steam behind it escapes, and the outer end of the vane coming in contact with the curved guide at its rise is gradually driven until the guide fills the space between the piston and the edge of the case. After passing the guide the inner cam-shaped block drives out the vane, to be acted on as before described, and so on with all the sliding vanes. When used as a pump, liquid instead of steam is received by the inlet passage.

NOTICES TO CORRESPONDENTS.

* * * Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

NITROLEUM—"W. S. and Co." (Glasgow).—The agent for the sale of Mr. Nobel's blasting-oil in this country is Mr. F. Cusel, of Wood-street, London. We are not aware that it has yet been adopted in any British mine.

THE COAL QUESTION.—Allow me to ask your correspondent, "M. E." (Yorkshire), from whom an interesting letter on the Working of Coal appeared in the Journal of July 21, what items he includes in the cost of underground conveyance of coal, as given in his letter?—M. E.: *Derbyshire*.

NEW CLIFFORD.—Allow me to correct your correspondent of last week, by stating that the discovery in Clifford Amalgamated does not "about" the New Clifford. It has not the slightest connection whatever with it, being over a mile from the nearest point of the set, and on quite a distinct run of lodes.—*MINER*.

CHONTALES GOLD MINING COMPANY.—Is there any truth in the statements, somewhat freely circulated, that the accounts received from these mines are of unsatisfactory character as to cause the directors to send out the secretary to institute a minute investigation of the financial condition of the company; that the disagreements between the chief officials assumed at one period so serious an attitude as to justify the Government of the country to send up to the mines a strong military force; and that the disorganisation among the company's employees was so great that some have left the service, and are now on their way home? If these statements be correct, have we, as shareholders, not a right to expect the directors, who are supposed to be the shareholders' trustees, to communicate such information? It is hardly enough that the dry details of the agent's report should be published, for even supposing that satisfactory progress is being made with the development of the mine—which can hardly be conceived possible, if the rumours above referred to have any foundation whatever; but, if such be the case, what advantage can result to the shareholders when every other detail is thoroughly discredited? I have reason to believe that much unfavourable information came to the knowledge of the directors by the mail to hand in July. For what reason has it been withheld from the shareholders?—A SHAREHOLDER.

SUBSTITUTES FOR BANKRUPTCY.—In the half-year ending April, 1866, 2447 deeds of assignment, composition deeds, or deeds of inspectorship were registered. The unsecured debts amounted to 6,917,621. Of the 1191 composition deeds, two-thirds provided for the acceptance of a payment not exceeding 6s. in 11.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

reluctance to furnish full information, which it is hoped will be overcome when the purpose of the enquiry is more fully understood, by the proprietors of the mineral oil works.

GENERAL SUMMARY OF THE MINERALS RAISED AND METALS PRODUCED IN THE UNITED KINGDOM IN 1865.

	Minerals raised.	Metals produced.
Tin	15,686 Tons	£ 867,435 £ 971,273
Copper	198,298 Tons	927,988 Tons 11,888 ... 1,134,664
Lead	90,451 Tons	1,163,134 ... 67,181 ... 1,433,161
Silver	Ozs.	... Ozs. 724,856 199,335
Zinc	17,842 Tons	52,478 Tons 4,040 ... 104,810
Pyrites	114,195 Tons	71,174 ...
Gold quartz	4,290 Tons	... Ozs. 1,664 ... 5,824
Iron	9,010,045 Tons	3,324,804 T. 4,819,254 ... 11,774,220
Coal	98,150,887 Tons	24,537,621 ...
Earthy minerals and others returned	774,496 Tons
ditto not returned (estimated)	650,000 Tons
Metalliferous and metals other than above (estimated)	150,000 Tons
Value of minerals	£32,359,080	Metals £15,773,287

The following, therefore, represents the total value of our Mineral productions:-

Metals obtained	£15,773,287
Coal	24,537,621
Earthy minerals, not including the ordinary clay or building stones	1,434,496
Total	£41,745,404

To this, the value of the crude Mineral Oil obtained from the Bituminous Shale must be added.

The quantities of Coal produced in the Coal Districts of Europe and America have been given, with the hope of rendering the MINERAL STATISTICS of 1865 useful to all who are interested in the several questions which such information aids to answer.

The Mineral Statistics give, as the latest and best account of the coal produced on the continent of Europe and in America the following returns:-

France, 1865	Tons 11,300,000	Bavaria, 1862 (lignite) Tons 45,570
Belgium, 1862	9,758,225	Zollverein, 1863 (coal) ... 16,396,707
Prussia, 1863	10,074,885	Zollverein, 1863 (lignite) ... 5,459,494
Prussia, 1863 (brown coal)	4,003,044	Austria, 1862 (coal) ... 2,265,228
Saxony, 1863	1,902,175	Austria, 1862 (lignite) ... 1,786,679
Saxony, 1863 (brown coal)	428,615	Russia, 1863 ... 6,350,000
Grand Duchy of Baden, 1864.	12,336	Denmark, 1864 ... 2,755
Hanover, 1863	287,415	Sweden, annually ... 30,000
Hesse and Nassau, 1864	79,296	Holland, annually (inferior) ... 18,000
Electoral Hesse, 1865	308,150	Portugal, annually ... 14,500
ditto 1865 (brown coal)	170,600	Switzerland, annually ... 15,100
Bavaria, 1862 (coal)	221,220	United States, America, 1864 14,593,659

THE SELECT COMMITTEE ON MINES.

In considering the weight and force of the evidence given before the Select Committee on Mines, we purpose to deal only with the complaints of the miners, as set forth in their petition, and the remedies they pray for, and leave for observation on another occasion other subjects not included in that petition, which have "cropped out" during the investigation. The complaints are 10 in number, and they were supported directly by 18 witnesses of the collier class, including M'DONALD and NORMANSELL, the agents; also by the Rev. H. R. SANDFORD, Government Inspector of Schools for South Staffordshire and North Worcestershire. Mr. SANDFORD was, however called by the CHAIRMAN, and may be taken as an independent witness. On the other hand, the masters opposed to the mass of testimony thus supplied that of six of the Inspectors of Mines, two medical men, and sixteen gentlemen of the highest reputation and standing as managers, engineers, and owners of mines. Each witness was examined first by some particular member of the Committee, who was informed by the agents as to the points to which he would speak, and then cross examined by the other members of the Committee; and thus it frequently happened that important, because unintentional, testimony was elicited. There was some little attempt by the CHAIRMAN to confine the examination by some pre-arranged rules, but the Committee never scrupled to avail themselves of their right, as members of the Legislature, to put questions, and thus until a witness left the room it was not certain that his evidence was closed. This irregularity tended to overload the official shorthand writer's note book with an amount of irrelevant rubbish; but it, no doubt, on the other hand, was favourable to the full development of truth. Members of such a Committee are selected on account of their known opinions on the subject under investigation, or upon cognate subjects. Thus we may presume Prof. FAWCETT was chosen because he holds doctrinaire views on the employment of labour; Mr. BRUCE, because he was the minister of education; Messrs. KINNAIRD and FERRAND, for their assumptions of excessive humanity; Messrs. AYRTON and NEATE, because they moved for the Committee, and so represented directly the operative miners who had petitioned; Lord CRANBORNE and Gen. DUNNE, for no particular reason, except, perhaps, to see fair play; and the remainder of the Committee because, directly or indirectly, they were connected with mines or the mining districts. One member, Mr. BRADLEY, never attended at all; Messrs. NEATE, LIDDELL, WOODS, FOSTER, GREENALL, FAWCETT, and Sir P. EGERTON never missed being present from the commencement to the end of each sitting; while the others dropped in for an hour or a half-hour, fired a shot at the witness under examination, and then took their departure.

1. The petition alleges that, on account of the want of an uniform system of weighing, it is impossible the true value and quantity of the miners' labour can be ascertained, and prays for a law making it compulsory for all coal to be paid for by weight only. On this point the workmen failed to make out a case of hardship. It was shown that the greatest possible inconvenience would result from the compulsory adoption of an uniform weighing system; and, indeed, that such a system would be impossible, inasmuch as there is the greatest diversity as to modes of calculating wages, arising out of the peculiar circumstances of many of the pits. It was admitted that if it could be adopted it would be the fairest mode of payment, but, if so, it appeared more than probable that the masters would be the greatest gainers. In places where it had been adopted the workmen had requested to return to the old system of measuring; and everywhere the price paid (whether by weight or measure) was the result of a bargain between the employers and employed. On the other hand, some modification of the system of forfeiture, whether the payment is by weight or by measure, would remove an apparent injustice.

2. The second averment is that the petitioners and their families are seriously inconvenienced by their wages being paid at too long intervals, and made dependent upon truck shops; and they pray for a compulsory weekly payment. In answer to this, it was shown that payments on account were made everywhere; to within a fraction of the amount earned, that no real inconvenience existed, and there were no truck shops except in Scotland. It appeared, too, that the miners always have one play-day after settling days, and often take a second, and that more frequent settlements, therefore, would be an injury rather than benefit to themselves and families. With regard to truck in Scotland, it was alleged that the shops were established for the benefit of the workmen, and it was proved that no complaints were ever made as to the quality and price of goods supplied, both being more in favour of the workmen than those of private dealers, and that Mr. M'DONALD himself had his goods from a so-called truck shop. On the other hand, it was admitted that a preference was shown to the workmen who dealt at the masters' shops; although printed notices were put in, to the effect that no miner was required to lay out any portion of his earnings at the stores. It was proved that "the store" system was carried on to a great extent in Scotland, in spite of the Truck Acts; but it was also shown that the present laws which are operative in England could be put in force in Scotland.

3. The petitioners are, they say, "deeply impressed with the low social condition of the miners, and believe that it arises from want of opportunity and means to educate their children, and they pray

that no boys be permitted to enter the pits until 12 years old, and until 14 their time be limited to eight hours per day." On the points here raised the evidence was greatly contradictory. First, as to the number of boys employed under 12 years old the miners appeared to have no accurate knowledge. Their ordinary expression showed that they were merely guessing: some said 8 or 10 to 100 men, others 20, others 10 to 20, and so on. In answer to this, Mr. DAY put in a return from 90 of the largest collieries in England, which showed that in 54 of them no boys under 12 years old were employed, and in the others 677, or scarcely 5 per cent. The witnesses on the other side, who were employers, stated that they did not employ boys so young, on account of the trouble the necessity for educational certificates gave. It was also proved that the men themselves were alone to blame for the employment of their children at so tender an age; that they took them down the pits against the rules, to aid in increasing the "out-put;" and that where the boys were prevented from going down they were sent to other labour, if procurable. It was admitted that there was an abundant supply of schools and teachers, and the colliery owners had adopted a system of rewards for regular attendance, which had had a good effect. The evidence of Mr. SANDFORD, Inspector of Schools, however, strongly supported the idea that the state of education is low as compared with other industries. He recommended the extension to mines of the factory system; by which boys are only worked half a day, or alternate days, and that generally education should be more compulsory than has been usual in England. It was shown, however, that in mining the employment was so irregular, the holidays taken by the men so numerous, and their habits so self-willed, that it would be almost impossible to adopt any system of half time or alternate days. There was also another insuperable objection. Any such system would involve the necessity of relays, and as there is now a scarcity of boy labourers, it would be impossible to obtain the increased number which would be required. On the whole, it may be said that no grievance which admitted of remedy was proved. The enquiry as to the "low social condition" of adult miners elicited some remarkable information. Mr. NORMANSELL, the secretary to the Colliers' Trade Union of South Yorkshire, said that the miners were generally provident and prudent, that many of them not only lived in houses of their own, but had two or three to let to others; that their houses were well furnished, and there were plenty of pianofortes. The medical evidence was decidedly against there being anything deleterious to health in mining labour. It showed that the healthiness of the worst districts would bear comparison with any other, that the miners were adepts at athletic exercises, and were famous runners. They had nice clean houses, paid attention to sanitary precautions, had no special diseases, and enjoyed as low a rate of mortality as the most favoured agricultural districts. It appeared incidentally, however, that valuable, but thin, seams of coal could not be worked without boy labour.

4, 5, and 6. Under these heads the petitioners state that "the fearful sacrifice of life in mines indicates that the legislative measures hitherto passed have proved to be totally inadequate for securing the personal safety of miners; that working the thick coal of Staffordshire on more than one face is highly dangerous; and that the iron and limestone mines require legislative supervision." The extra danger of working the thick coal on two faces at once was admitted; there was scarcely any evidence as to limestone, and not much more as to ironstone, except when worked in conjunction with coal; but on the general statement as to loss of life, it was proved conclusively by Mr. ATKINSON, from official returns, that the fatalities were between 30 to 40 per cent. fewer, taken in proportion to the coal raised, than eight years ago. The same tables showed that the decrease of fatal accidents had been facilitated by the passing of the Duplicate Shaft Act of 1862.

7. The petitioners next say—"The practice of employing females at the pit bank leads to gross immorality, and pray that it may be prohibited." This practice was shown to prevail only in a few districts. Two witnesses were examined—Mr. GILROY, of the Ince Hall Collieries, who employed about 80 women; and Mr. JONES, of the Lilleshall Collieries, who employs 580 women and girls—and they denied most positively the existence of any immorality arising from their employment, but, on the contrary, affirm that they are more moral than agricultural or factory women, that they liked the work, and that they would consider it a great hardship to be prohibited from being so employed.

8. The petitioners suggest that loss of life "can only be prevented by the appointment of a sufficient body of sub-inspectors to examine the mines internally;" and, moreover, it was urged that sub-inspection was already provided for by the owners, in the shape of their overmen, viewers, managers, and others, whose duty it is to see that the mines are always in working order; and that the Home Secretary has power, under the present Act, to multiply the number of Inspectors. On this point, the six Inspectors examined all contended that they were fully equal to perform the amount of duty cast upon them by the Act, and that more frequent and particular inspection would have a tendency to lower the sense of responsibility felt by the masters and managers. The weight of evidence is, however, in favour of more inspection, to which, we understand, the owners do not object, if the additional Inspectors are not an inferior class of men to those at present in office.

9. But it is alleged also that "accidents in mines are caused chiefly by want of skill, or diligence, or care in the subordinate officers;" and the petitioners pray for a scientific examination of the men so employed. To this it was replied that the carelessness of the workmen themselves was by far the most prolific parent of accidents; and that intimate practical knowledge was far better for such officers than any scientific training.

10. The petitioners aver, lastly, that in the case of accidents justice is not done them by coroners' juries, which they pray may be so composed that not less than one-half should be operative miners. No evidence of injustice was given, and it was shown that if actual pitmen were not invariably on the juries, the persons who were are the surrounding householders, small shopkeepers, and others, whose interests and sympathies are more with the men than the masters. Juries are summoned by the local police authorities, and probably no objection would be raised to an order from the Home Office, requesting that a certain proportion be taken from the operative class, if householders; although one of the witnesses said that colliers made the worst possible jurors.

The case presented on the part of the operatives was greatly weakened by the direct contradiction given to many of their witnesses. One of them, named CARTLIDGE, was proved to have worked only for few weeks in the district he came to represent, that he was almost unknown to the workmen, that he had been dismissed under not very creditable circumstances, and that every statement he had made was false. A motion was made to strike out the whole of his evidence, but the Committee decided to let it stand and the contradictions stand together.

The minds of men are swayed by such varied motives, views, and impressions, facts present such different aspects, even to the most disinterested judgments, that it is difficult to anticipate before it is pronounced the verdict of even a common jury. We cannot, therefore, presume to say what ought to be the finding of the Parliamentary Committee on the vast mass of evidence placed before them, so varied in its details, and so conflicting in its character. It may be that they may decide against the advisability of any new legislative interference between the mine owners and the mine workers at all; but it is more probable that some alterations may be suggested to Parliament in regard to inspection of the mines, with view to prevent accidents, and to effect a more ready application of remedies when defects in ventilation and working are pointed out than now exists. With regard to "weighing," the committee will, doubtless, recommend that where that mode of payment is in use the ordinary inspector of weights and measures shall have jurisdiction over the machines used. There is also a considerable probability that the employment of boys under twelve years of age will be prohibited altogether; but that no further steps will be taken towards extending the Factory Act to mines with regard to education. It is not likely that any further interference with the labour of women will be recommended, or the suggested competitive examination of viewers, overmen, and managers will be attempted. Probably, as to the composition of juries, it may be recommended that a proportion

shall be operative miners from other pits than the one in question. It is more than likely that the Committee will also make a recommendation with regard to the system of forfeitures, although that subject was not mentioned in the miners' petition. These are but guesses, but they are based upon a careful study of not only the evidence, but the scope and tone of the questions put by the more active members of the Committee. Reports to the House, however, unanimously agreed upon, are invariably compromises, and both sides must expect to give up something. We can only, in conclusion, express a hope that, whatever may be done, it may prove auxiliary to the evident desire of the colliery proprietors to adopt every expedient which may tend to diminish danger to human life, and that it may conduce to the physical, moral, and social improvement of the miners.

THE NORTH OF ENGLAND IRON TRADE.

The iron trade prospects here are not much altered since last week. The reduction of the Bank rate has had a highly invigorating effect, however, and a more cheerful tone now prevails. It is expected that, should the men consent to work at the reduced rates, a moderate supply of orders would begin to find their way into this locality. As it is, even supposing the works were in operation, other districts—such as South Wales and Belgium, for instance—would beat us out of competition altogether. A reduction of a few shillings per ton, which will be effected by the 10 per cent. lowering of wages, makes a great difference, considering the facilities which the above-mentioned places possess for producing a cheap kind of iron. The men are not at present at work, though there are signs that they will commence before long. In several places the mills are being carried on by the foremen, managers, and labourers. The masters remain perfectly firm and unanimous about the reduction, and express themselves fully determined to carry their point under any circumstances. It is reported that at the late meetings of the men considerable difference of opinion has prevailed, and that it has been with great difficulty that the leaders have been able to prevail on the men, as a body, to stand out.

The Union executive have sent another communication to the masters, suggesting the settlement of the dispute by means of arbitration: one arbitrator to be chosen by each side, and an umpire selected, if necessary. This proposition will, we understand, be considered by the masters at an early meeting, and though fully disposed to give their careful consideration to any plan by which there is a chance of the present struggle being avoided, there does not appear much hope of the present dispute being terminated in this way. It will be remembered that in the case of the last strike in South Staffordshire, the men in one part of the district declined to go to work except the masters would agree to submit all future differences to arbitration. The masters promised to give their best attention to a plan by which strikes might be avoided in future, and the men went to work. The plan suggested by the masters, and which was based on a sliding scale of remuneration, was afterwards considered by the council of iron trade delegates; and though the employers had been at no small trouble to prepare a plan, it was summarily dismissed from consideration, with the resolution "that the masters' proposition be swept from the boards, as absurd." With the above experience in view, the masters are not over sanguine as to the results of any proposal to settle the labour dispute by arbitration; but, nevertheless, they are quite willing to give the matter their serious consideration.

THE ITALIAN GOLD MINES.

The remittances of gold made to London from the Italian gold mines continue to increase in importance, and give assurance of a very great future for them when the projected improvements shall have been carried out. As will be seen from the reports, the Pestarena Gold Mining Company have advised of another remittance, of 818 ozs. of fine gold, of the value of about 2650*l.*, obtained since the last smelting in June, when 776 ozs. were remitted, making together 1594 ozs. of gold, of the value of above 5100*l.*, obtained since April last, by treating only about 6*t.* tons of ore daily, by the native mills, and without the aid of improved machinery. The ore from the Aquavite and Peschiera Mines, belonging to that company, yields by the native mills at present over 2 ozs. of gold per ton. There is no doubt that these mines, which are already making a good profit, will take a front rank among gold mining enterprises, as great quantities of rich ore are opened in them, and ready for treatment on a large scale by more powerful machinery. The remittance from the Valmalzases Company is 386 ozs., of the value of 1158*l.* This mine will greatly increase remittances when the present exceptional difficulties, produced by the war, shall have been removed. The working of the new amalgamation establishment, erected at these mines, continues to give full satisfaction. The Val Toppa Mining Company have also received another remittance, of 280 ozs. of gold, value about 1000*l.*, and the gold returns of this mine will show a great increase for the future. All the gold obtained so far has been produced by native mills, erected on a stream which is nearly dry for many months every year; before the end of this month, however, the first section of the new establishment will commence working, with the advantage of a great and permanent water-power, derived from the River Anza. The first two new mills of the Val Antigoria Gold Mining Company have been started, and 28 ozs. of gold are remitted from trials of ore from these mines. The immediate erection of more mills is strongly urged, as the mines are stated to have much improved, and are in a condition to supply a large number of mills with ore as soon as the new hoisting apparatus can be erected. The Val Antigoria gold sells for nearly 4*l.* per ounce. Altogether the July remittances from the above-mentioned Italian mines amounts to 1511 ozs. of fine gold, of the value of about 4800*l.*; the May remittances having been 1132 ozs., sold for 479*l.* The total remitted from them since May is 2643 ozs., worth 9600*l.*

BRITISH ENTERPRISE IN SWEDEN.

Although the unexampled financial pressure which has existed in England for some time past—firstly, from the anticipations of a collapse, and then from the panic itself—has exercised a temporarily prejudicial influence upon every class of enterprise in which English capitalists have been engaged, there can be no doubt that those who have survived the tempest will be amply compensated for all the inconvenience they have been put to, in the vastly improved position which commercial affairs generally will now occupy. These inconveniences and the subsequent improvement will, of course, be more or less apparent, according as a given enterprise is connected with an established industry or district, or with one comparatively unexplored, and hence it is that the GELLIVARA COMPANY, whose operations are carried on in a remote district, previously almost unknown to the British capitalist, has suffered severely, although regarded by those best able to pronounce an opinion on the subject as possessing all the elements necessary to ensure permanent success. The Stockholm *Afton-bladet*, of July 26, states that the disheartening information that the workmen could not be paid their wages had compelled Capt. Schougo to stop all workings, and send the men to their homes; but it may be hoped that the steps authorised at the meeting in London, on Tuesday, will enable the directors speedily to alter this state of things, and to place the affairs

The Gellivara Mountain is looked upon throughout Sweden as an El Dorado. This is the bright side of the picture—the silver lining to the cloud to be removed by the company. Looking to the other side, this mountain is in a high northern latitude, where intense cold is frequent, and to which there are, in our civilised point of view, no means of access. The business of the GELLIVARA COMPANY is to establish the means of access, and transfer their El Dorado either to Sheffield or to the iron-making districts of Russia, and divide the profits amongst their shareholders.

To estimate the commercial results of the undertaking, it is simply to consider the value of the metal, timber, &c., obtainable from the company's estate, which covers about 1,250,000 acres, in comparison with the cost of providing the means of access. Fortunately, the entire distance over which the communication is wanting is an enormous plain, presenting no engineering difficulties which cannot be surmounted with ordinary skill, and without any extraordinary outlay. But that the financial pressure has prevented the company from obtaining the capital at the rate stated to be requisite in the prospectus, it is probable that ere this the railway would have been completed, and the enterprise in full operation; as it is, the necessity has arisen for the reconstruction of the concern, but as this has afforded the opportunity for improving the constitution of the company, it is probable that the circumstance is scarcely to be regretted.

There is an ample field for the profitable employment of capital, and if the shareholders, debenture holders, and mortgagees act harmoniously together, the GELLIVARA COMPANY may long enjoy a favourable position amongst the profitable industrial undertakings developed with British capital, and at the same time confer enormous benefits on Sweden.

THE DEPOLARISATION OF THE "NORTHUMBERLAND."

In the *Mining Journal* of Feb. 3 is an abstract of a paper read at the Royal United Service Institution, "On the Deviations of the Compasses of Iron Ships," by Mr. EVAN HOPKINS, C.E., F.G.S. It was then stated that the principal cause of the compass errors which embarrassed and endangered the safety of the navigation of iron ships was the *polarity* acquired and developed by the ship on the slip during construction, and that if this polarity be destroyed the compass of an iron ship could be rendered as correct in its action as on board a wooden vessel. Mr. HOPKINS maintained that he could, by means of certain arrangements with battery and electro-magnets, *depolarise* or destroy the polar magnetic influence of any given iron ship before leaving the dock, and thus put an end to all the troubles and dangers arising from the existing deviations represented in the "Memorandum of the Royal Society to the Board of Trade." Such an announcement on so important a question, the value of which to a maritime nation cannot be estimated, induced the Lords of the Admiralty to place the *Northumberland* at the convenience of Mr. HOPKINS, for testing the practicability of his somewhat startling discovery. It was fully admitted that if Mr. HOPKINS could effect so desirable an object it would not only be the greatest boon to seamen in particular, by freeing them from the chief anxiety attending the navigation of iron ships, but would confer the greatest benefit on our commerce in general, by reducing the dangers to which so many lives and so much property are exposed.

On March 28, Mr. HOPKINS inspected the ship, and after a careful survey of her magnetical conditions, made an accurate delineation of the polar curves. It was then shown that the *Northumberland* was a very powerful magnet, her bow being a north pole, with polar lines radiating from the end to the extent of 60 feet, within which the direction of the compass conformed only to the direction of the polar force of the ship.

After launching, the *Northumberland* was taken to the Victoria Docks to finish her plating and equipment, and was placed therein in a contrary direction to that which she occupied when on the slip. The stern is now placed to the north, and the stem to the south; hence the polar force of the ship is acting antagonistically to the direction of the terrestrial magnetic force. The general character of these forces are shown on neatly-drawn diagrams, the survey of which was very carefully done on the 1st and 2d of August, before the ship was depolarised.

On Aug. 4, Mr. HOPKINS, by means of two of Grove's batteries, of five cells each, and electro-magnets, completely destroyed the polarity of the hull in the course of a few hours. Immediately after, a compass was carried along the ship's side in a boat, within 4 feet of the plates, from the bow to the stern, without being affected, whereas before it had a large deviation at a distance of from 20 to 30 feet. The sides of the ship are at present encumbered with ropes, chains, pulleys, &c.; when these are removed, Mr. HOPKINS will operate on the stringer plates, and thus free the steering compass entirely from all disturbing influences which cause the deviation.

The *Minotaur*, which was built head north, like the *Northumberland*, had a deviation of 62° in the steering compass, placed 55 feet from the stern. That ship has been swung and the compasses corrected about a dozen times since she left the dock, in 1864, yet she cannot be navigated, even now, with safety in a fog. The alleged advantages, and the greater safety, in the navigation of the iron ships of the Royal Navy do not depend on any improved system of correction, but rather on their being able to afford time to heave to in fog, and having at command at all times a large crew, dockyard riggers, and well-trained officers for swinging and correcting tables of deviations, the cost of which and the delays attending repeated evolutions cannot be incurred in the mercantile marine.

A full report has been furnished to the Lords of the Admiralty. This important subject is now under the consideration of the hydrographical department, and it is expected the whole of the iron fleet will shortly undergo the depolarising process, and thus put aside the objectionable correcting magnets, and relieve the officers from the inconvenience and trouble attending the present unsatisfactory system.

We are informed that Messrs. Laird Brothers, of Birkenhead, and other large iron shipbuilders, now, since Mr. HOPKINS has practically proved on such a large vessel as the *Northumberland* that he can remove the cause of the deviation, have taken the subject under consideration, and it is expected it will be soon universally adopted, and more especially if approved by the committee of Lloyd's Register.

REPORT FROM SCOTLAND.

GLASGOW, AUG. 15.—"The good time coming," which has been so long and so anxiously waited for, looks as if it were disinclined to throw even its coming shadow on the iron trade. The fact is, this trade could not possibly be worse. The miners discontented—the half of the furnaces out of blast—no money to be had even at 10 per cent.—few orders, and iron selling under its cost—this is a congeries of evils which it is fervently desired may be speedily removed. The hope that the Bank will relax the screw one turn this week, and be content with 9 per cent., is the one ray that is peering through the darkness. It would indicate that a commencement to the return of prosperity had been made. During the week the pig-iron market has been very flat, and prices have yielded to a temporary pressure 6d. per ton, but the market has again got stronger, and we have now advanced on our last quotation of 5ls. 6d. The enquiry for iron is not great even for shipment, and local consumption has fallen off considerably, owing to the general dulness. During the last eight weeks our make has decreased 80,000 tons, which will tell at once on prices when the weak holders of warrants have sold out. The shipments of the week have been 12,470 tons, and in the same week of last year the amount was 13,140 tons. This makes the total shipments of the year 342,300 tons, and the decrease of the same period 82,185 tons. The market has been much firmer to-day, 5ls. 7½d. up to 52s. cash paid, and a considerable business done. Sellers over at 52s., buyers 51s. 10½d. The malleable iron trade may be said to be in a wretched condition, the makers fighting against low prices and unsatisfied workmen. They are only working three or four days per week, and there are but few orders coming in. The reduction in the wages of the operatives, noticed last week, has not been carried out, the masters waiting until the reduction can be made general both over England and Scotland. The works of Edington and Son, ironfounders, is still being carried on, but there are doubts if the estate will yield 10s. in the pound, as formerly noticed. The partners of the bankrupt firm of M'Ewen, Bryson, and Co. are to be examined before Sheriff Alison on the

24th inst. The state of their affairs is kept as secret as possible, but we believe one of their creditors has offered his interest in the estate for 1s. 6d. in the pound. Perhaps this may give some clue to the probable composition which the assets may be able to provide.

COALS are quiet, and rather cheaper, the ironmasters sending their surplus supplies into market. The shipments of this week are fair, being 27,430 tons, against 30,220 tons in the corresponding week last year. There have been several meetings of colliers and of colliers' delegates during the week, from which we learn that a reduction of 6d. per day had been pretty generally acted upon; but as some masters wished to bring the wages down to 4s. a day instead of 4s. 6d., for the short day of eight hours, it was suggested that an example should be made of those employers by bringing out their men. In the Slamanan district the men working at 4s. 6d. had got notice of a reduction. At the delegate meeting, held at Motherwell, they asked advice as to what they should do? Mr. Malcolm, seconded by Mr. Steel, moved "That the men at Slamanan be advised to resist the attempted reduction," which was agreed to. It was also agreed, at the same meeting, that the three districts Wishaw, Larkhall, and Hamilton, should meet at the Old Quarry, Hamilton; and that Glasgow and Baillieston should also meet on the same day at the Channel Pit, Tollcross, to consider what line of action should be adopted in bringing out the men from the sale pits, the masters of which insist on the reduction to 4s. A general conference of miners' delegates from all parts of Scotland has been arranged to take place on Monday, the 25th instant, in the Bell Hotel, Glasgow, to consider the short-time movement and other trade matters.

COLTNESS IRONWORKS—PRESENTATION.—A deputation of the workmen of Coltress Ironworks waited upon Mr. Robert Scott, assistant manager to Mr. Greig, for the purpose of presenting him with a testimonial of their regard and esteem before he leaves this vicinity for new appointment, as manager at West Calder Chemical Works. Mr. A. Hastie, foreman joiner, in a few appropriate remarks, presented him, in the name of the workmen, with a very handsome gold watch and massive Albert chain—the watch bearing a suitable inscription. He then presented Mrs. Scott with a lady's splendid gold watch, saying that he hoped they would be long spared to enjoy the benefits of these gifts and appreciate their value. Mr. Scott feelingly replied, thanking the donors for the valuable gifts which his wife and himself had received, and which he never had expected. He also spoke of the success he had experienced at Coltress, and thanked the gentlemen who had been instrumental in his promotion for their kindness to him since he had come to this place, nearly nine years ago.

REPORT FROM NORTHUMBERLAND AND DURHAM.

AUG. 16.—The dispute in the Iron Trade remains in the same state as last reported, so far as the Union men and the masters are concerned, and it is not likely that any further steps will be taken by either of the parties, as any general arrangement appears now to be hopeless. The mills at Gateshead and Jarrow continue to be kept at work, and it is expected that the amount of work will be gradually but constantly increased by the accession of new hands. It is quite certain that hundreds of starving men are anxious to be at work, but they are at a loss as to getting quietly in. However, necessity has no law, and the strike is not likely to be settled in any other way than that we have pointed out—that is, by small accessions of men, and not by any agreement come to with the mass. The general business of the district, with some exceptions, appears to be getting worse. The Chemical Trade has improved a little lately, and the imports in some branches are very good; but, generally speaking, much dulness prevails over the entire district, and this is, of course, much increased by the disastrous strike in progress. Although the Coal Trade has, under the circumstances, shown most wonderful vitality, the effects of the present strike, and the bad state of trade generally, are beginning to be apparent. At some of the collieries in Durham, especially in the western part, heaps of coals are beginning to accumulate, and as the iron furnaces around Middlesbrough and the district are many of them out, the home demand for coke is most seriously affected; consequently coke is being sent to Tyne Docks and other ports for shipment in considerable quantities, and to effect sales reduced prices are accepted. The house and steam coal trade continues amid all this very good, and the pitmen are generally making fair wages, and appear to be perfectly content with their present earnings.

The smoke nuisance is now pretty certain to be abated, and this vexed question set to rest, after many years of trial, and, generally speaking, failure. So many schemes have been tried, and failed to effect this purpose, that a "smoke doctor" has become almost as great a nuisance as the smoke itself. However, the late Act of Parliament, when applied, will compel the consumption of smoke at any rate in and near towns; and, further, if a really good system has been discovered, whereby smoke is dispensed with, and greater economy of fuel and labour effected, it becomes the interest of all parties to adopt such a system, without reference to the requirements of the Act alluded to. There can be little doubt that "Juckes's Patent Revolving Grate" completely supplies the want so long severely felt. All other systems have failed, either from defects inherent in their construction, or from the want of permanence in the construction of the apparatus. Juckes's furnaces have now been in operation in this district a considerable period—quite long enough to determine their merits, and have proved uniformly successful. At the Elswick Colliery, near Newcastle, six of those grates are constantly at work, and give great satisfaction.—1. There is an entire absence of smoke—the greatest nuisance of our times.—2. The quantity of coal consumed in forming a given quantity of steam is, we believe, considerably less: we are not in a position at present to give the figures representing the quantities, but that a saving is effected on this head cannot for moment be doubted.—3. As the furnaces are fed in the front from a hopper, the heavy expense of firemen is almost entirely dispensed with, and, taking six boilers, the saving on this head alone is very important. We are not in a position at present to give the details as to the comparative cost of these furnaces and the common one, but hope to do so at a future time; but it is an absolute fact that Juckes's furnace entirely prevents smoke, and there can be little doubt that it is also much cheaper to work. These furnaces have been at work for some time at the Monkwearmouth and other collieries, and four of them are put in at the new colliery establishment at Wallsend, and they are also in use at some of the ironworks on the Tyne, and, so far as we can ascertain, they have given entire satisfaction wherever they have been tried; and it must also be noticed that small coals or slack are used in these furnaces in preference to large coal.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

AUG. 16.—It has been stated that a slight improvement in the demand for Iron has been experienced during the last two weeks. Some makers, doubtless with good grounds so far as their own experience goes, doubt there having been any increased demand, but several of the leading houses have received rather more orders. The trade, however, is much depressed, and, taking the entire district, the actual production of finished iron is now less than half what it was before the commencement of the depression. Underselling, too, is very general, and in many cases iron is sold at 17s. per ton under the list prices. In such a state of things manufacturers are fortunate if they can keep their works partially employed without positive loss. The determination of the directors of the Bank of England to-day to reduce the rate of discount was learnt with much satisfaction at Birmingham, and it is hoped it may prove the first streak of brightness heralding the dispersion of the dark clouds of distrust and suspicion which have so long darkened the commercial atmosphere. Several failures have occurred in the iron trade in this county during the late period of pressure, but none of so great magnitude as that of Mr. W. Bates, of the Ravensdale Ironworks, near Tunstall, in North Staffordshire. It has for some time been regarded as not improbable, one source of loss to which Mr. Bates has been exposed arising from a series of strikes on the part of the men on various matters. The debts secured are stated at 57,000*l.*, and the unsecured debts at 47,000*l.*, making a total of 104,000*l.* It is estimated that the assets available for the payment of the unsecured debts may yield about 10s. in the pound. Mr. J. Fletcher, of the Spring Hill Iron-Sheet Mills, Birmingham, has suspended payment, as also have the Bourne Brook Mill Company, who have rolling-mills near the same place. A Boiler Explosion, causing the deaths of two men, one of whom was working the engine at the time, occurred at the Pinnox Colliery, near Tunstall, fortnight since, and was noticed at the time in the *Mining Journal*. The inquest was adjourned, to enable the boiler

which burst to be examined by Mr. Longridge, the engineer of the Manchester Boiler Insurance Association. It appeared from questions asked, that the whistle of the boiler had not been known to sound; but though the water was, probably, lower than usual when the boiler burst, there was no reason to suppose that the accident arose from an absolute deficiency of water. It may be remembered that the boiler was one of two, the other not being finished, and that the engine was being worked with one. Just before the explosion it was noticed that the pressure suddenly rose from 35 to 36 lbs. Mr. Longridge pointed out that the construction of the boiler was very defective. The iron was moderately good, but the construction admitted of considerable vibration, which had led to the fracture of a portion of the angle-iron used in the boiler. Mr. Longridge said that the boiler would not have been safe at a higher pressure than 28 lbs, and as the gauge showed a sudden rise from 35 lbs. to 36 lbs., it probably, burst at a pressure of 40 lbs. Mr. Wynne, Government Inspector of Mines, concurred in Mr. Longridge's view. A verdict of "Accidental Death" was returned. It is worthy of note that the last boiler explosion in North Staffordshire was ascribed to the bad construction of the boiler. In the case under consideration, it was made at the works. It is most important that a person well acquainted with the subject should inspect all boilers, and the engineers of boiler insurance companies are very suitable persons to do so.

It has been mentioned that the Patent Shaft and Axle-tree Company (Limited), of Wednesbury, again declare a dividend at the rate of 15 per cent. This, however, only imperfectly indicates the excellence of the company's position. The report states the profits for the year at 54,918*l.*, making, with the balance brought forward, 61,015*l.* available for dividend. From this amount the directors take 30,000*l.*, or nearly half, and add it to the reserve and depreciation fund, and after paying the dividend, at the rate of 15 per cent., they carry forward 8185*l.* It is true that the dividend is only paid on 169,000*l.* of paid-up capital, the vendor, Mr. Walker, leaving 125,000*l.* at interest, but if the profits were spread over the whole the dividend which could be paid would be very large. This seems to be one of the most successful of the limited liability companies which has taken up a private business.

The directors of the Birmingham Town and District Bank in their report state that they have, in placing the bank under a new management, made an entire re-valuation of the securities, and with a view to meet probable or possible losses, have written off the balance for the previous year, and taken an amount for the surplus and reserve fund ample to meet all probable losses. They declare a dividend at the rate of 15 per cent., and are able, from the last year's profits, to carry a handsome sum forward. To meet an increase of the business they propose to make a further issue of shares.

It is stated that the manufacture of steel is being commenced at Birmingham by means of Siemens's regenerative furnace, which produces from slack a gas which is capable of making steel to advantage.

The North Wales section of the Potteries, Shrewsbury, and North Wales Railway has been opened for passenger and goods traffic, having satisfactorily passed the usual Government inspection. The line has been made by Mr. R. S. France, and at present extends to Llanynech, a distance of 18 miles, with branches up to the Brilidion and Nant Maur hills, which contain immense quantities of limestone, rock and road metal. The Potteries section of the line, which terminates at Market Drayton, there forming a junction with the North Staffordshire system, is at present in course of construction, and when complete will, by aid of the Cambrian Railway, which it joins at Llanynech, bring the South Wales districts into direct communication with the Potteries.

REPORT FROM MONMOUTH AND SOUTH WALES.

AUG. 16.—In the Welsh Iron Trade there has been a tendency to improvement during the past week, and there are indications that a reaction for the better will take place with the foreign markets before long. When the continued failures, which are almost daily occurring in the other iron-producing districts, are taken into consideration, Welsh makers must consider themselves extremely fortunate in being able to tide over recent and present difficulties without any such mishap taking place in the district, further than one or two small concerns. At present matters are in a very dull state; still, however, most of the works, considering the general depressed state of trade, are carrying on operations pretty fairly. There are no establishments to report as having, or about being, closed; but yet at most of them short time is the order of the day, and to be able to do this is accomplishing much, as things are. As stated in last report, home merchants and railway companies are much in want of iron, and the question with them is how it is to be had.

There are few parties who are in a position to enter into transactions whilst money is so dear; and it is impossible for Welsh makers to sell under existing prices, with wages at the old standard. Indeed, some of the masters who refused to carry out the proposed reduction, when it could have been enforced without producing any unpleasantness, as the men were willing to accept the notice, and continue work on the proposed new scale, are now lamenting the course they then took, and are the first to complain of the present scale. As the Yankees say, they exercise "tall talk" on the matter, but they must now, if they desire it, effect a reduction on their own footing, or abide by the result of the late meeting, and take their chance with the rest of the trade, as it is not to be expected that the other masters, several of whom have lately secured good contracts, will again join in a reduction movement.

Several orders have come in on American account, and, although they are not so numerous as expected, business with the markets of the United States is beginning to look encouraging. A fair share of the South American trade comes to this district. Russia and the other Northern Europe markets continue good customers, and there are signs of their becoming more so. With the East things are assuming a more hopeful aspect, and it will not be surprising to find in the course of a few weeks several contracts placed on Indian account. A small business has set in with the markets of Southern Europe, which bids fair to become greater as the prospects of a permanent peace get more certain. There is no change to report in the pig-iron market; the demand is limited, and the make is considerably reduced. The enquiry for tin-plates keeps moderately good, and the future assumes a more encouraging aspect. The steam coal trade continues to be characterised with much activity, and although there has been a slight falling off in the demand from the continental markets since the negotiations for peace have been entered upon, the markets of Southern Europe are taking considerable quantities. From the regularity with which orders come in, there is every likelihood of the present briskness lasting for some time. There are not such a scarcity of hands at the various collieries as there was a short time since, as the labour market has been replenished from the discharged hands at the ironworks; hence operations are fully carried on, whilst in many directions new works are opening up. Welsh steam is getting more and more in favour with home buyers, and colliery proprietors are directing more attention to the inland trade. In house coal the local consumption has slightly improved, and larger quantities are shipped coastwise.

The Taff Vale Railway directors intend at the forthcoming meeting to recommend a dividend at the rate of 9 per cent. per annum for the past half-year. This is at the same rate as in the previous half-year, whilst the dividend for the corresponding half-year, 1865, was at the rate of 10 per cent. per annum.

At the Monmouthshire Wagon Company (Limited) meeting, on Wednesday (Mr. Crawshay Bailey, M.P., in the chair), a dividend for the half-year was declared at the rate of 8 per cent. per annum, being at the same rate as was paid the previous half-year.

We are informed that the large blasting-engine, mentioned in last week's Journal as having been erected by Messrs. Matthew Loam and Sons, of Liskeard, at the Ebbw Vale Ironworks, was made by Williams's Perran Foundry Company, as well as the pair of 42-in. cylinder winding-engines, for the same extensive works.

EMPLOYMENT OF WOMEN UNDERGROUND—GOVERNMENT PROSECUTION.—At the Tredegar Petty Sessions, on Friday, Jas. Lewis sub-contractor at the Tunnel Pit, near Beaufort, the property of Mr. C. Bailey, M.P., was charged before the Rev. E. Leigh and Mr. A. Darby, with unlawfully employing Ann Davies and Sarah Morris underground. Mr. Plews prosecuted, and Mr. R. Harris defended. According to the opening statement of Mr. Plews, the proceedings were taken by Mr. Lionel Brough, the Government Inspector of Mines, by order of the Secretary of State for the Home Department. The charges were laid under the 13th section of the 5th and 6th Vols.

cap. 99, passed Aug. 10, 1842. On June 20 last, Davies was killed by a fall from the top of a stall in the main heading, and at the instant it was given in evidence that the two women had been employed in the pit five or six months by the defendant, who paid the deceased 9s. 6d. per week and light. John Richards was the contractor for the pit, and he acted as overman, but he sub-let part of the work to defendant, who had two headings. In consequence of an anonymous letter sent to Mr. Harris, the mine agent, that gentleman gave notice to Richards, and all the overmen, that females were not allowed to be employed in the pit under any consideration whatever, but, notwithstanding this, the two women continued to be employed by the defendant, and the fact of their being so employed would not have been found out had it not been for the unfortunate accident. The women did not go down the pit, but they entered it by way of a slip, and then had to wend their way along a circuitous route, about a mile, to get to the place where they worked. Mr. R. Harris pleaded guilty on behalf of defendant to both charges, and addressed the Bench in mitigation of punishment. The magistrates said they hoped the prosecutor would be satisfied with their decision, which was that defendant be fined the minimum penalty of 5/- and costs, or in default one month's hard labour for each offence. The maximum penalty was 10/- John Richards, the contractor and overman, was then charged on the same information with the same offence. The facts were precisely the same, and as the defendant pleaded not guilty, Mr. Plews called evidence. Mr. Harris objected that the summons could not be maintained, on the ground that the Bench had already adjudicated with regard to the employment of the two women. James Lewis had been charged with being the employer, to which he pleaded guilty, and as the employer they had punished him. Now, if that decision was right, then they could not proceed against Richards. Mr. Plews contended that the summons was good. The magistrates' clerk had no hesitation in saying that the objection was fatal. Mr. Plews said if the Bench felt any difficulty in the matter he would ask leave to amend the summons, by substituting "permitting" for "employing." Mr. Harris objected to this; and the Bench said that they would adjourn their decision for a fortnight.

At the Cardiff Police Court, on Friday last, Mr. Edmund Gibson, of Caerlaverock Colliery, Tonyrefail, was charged with committing wilful and corrupt perjury in the cause "Gibson v. Jones," tried at the late Glamorganshire Assizes. Mr. Simons of Merthyr, prosecuted, and Mr. Carter, barrister, defended. The facts may be briefly stated to be as follows:—Mr. Gibson had been a mining engineer residing near Carlisle, and at the Assizes he brought an action against Matty and Morgan Jones, of Llantrisant, for 60/- odd, for services rendered. In proof that he had been employed by them he produced his memorandum-book, and pointed to an entry of Mrs. Jones's name and address, of the names of certain collieries which he was to visit, and of a Mr. Geddes, in Edinburgh, on whom he was to call. He swore that Morgan Jones made those entries in his presence. Morgan Jones swore he did not make them, and Mr. Simons, his attorney, swore that they were, undoubtedly, in the handwriting of Mr. Arthur Owen Davies, another mineral engineer, who had been present with Mr. Gibson and Mr. Morgan Jones on the occasion of the making of the entries. On this evidence the jury returned a verdict for the defendants. Mr. Simons subsequently applied to the judge, Mr. Baron Piggott, to order a prosecution for perjury, but his lordship declined, and advised Mr. Simons to think it over before preferring so serious a charge. Mr. Simons then laid the information before Mr. Griffith Phillips, a magistrate, and the present summons was issued. Mr. Morgan Jones and Mr. Simons having given evidence in support of the information, an adjournment was asked to take the evidence of Arthur Owen Davies, who was too ill to attend. Mr. Carter contended that the alleged perjury was not material to the cause tried. The Bench decided upon adjourning the case for a week, the defendant being bound over in his own recognisances of 10/- to appear. Mr. Carter applied for a summons against Morgan Jones for perjury in his evidence before the Bench. The magistrates declined to entertain the application until the present charge was disposed of.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

AUG. 16.—There is no alteration whatever in the state of trade in Derbyshire since last notice, the demand for coal in particular being fully equal to the means of supply. This will be more apparent from the fact that the returns for the month of July, just issued, show that the quantity of coal sent direct from Clay Cross alone to the London market exceeded 18,700 tons. At Staveley, also, the enquiry for iron has been such as to show a marked contrast with any other iron-making district in the county, the men being fully employed, and the shares of the firm (Barrow and Co., Limited) being in a very healthy state, being at 17 prem. In Sheffield business is by no means brisk, still the general trade is improving, and the orders from America are coming more freely to hand, more especially for heavy castings and rails. In heavy armour-plates there a slight improvement, and the probability is that this very important branch of manufacture will greatly increase on the termination of the German war, and the express determination of the first Lord of the Admiralty, Sir John Pakington, to find a fleet befitting the requirements of a maritime nation like England. There can, therefore, be little doubt that ere long we shall see a large demand for the best plates, for which Sheffield stands pre-eminently high, the names of Brown and Co. and Cammell and Co. (both limited companies) being the acknowledged heads in the production of plates suitable either for armament by sea or land.

At the extensive ironworks at Elsecar, where the men have been idle for some time, work to some small extent has been resumed, and those puddlers who had not left the locality went to work on Monday night, whilst the millmen arranged to go in yesterday (Wednesday). At the extensive works on the Trent, the furnaces in blast are kept fully going, with plenty of orders on hand. The furnaces belonging to the Frodingham and Lincolnshire Companies, which have been under repair for some time, will shortly be put in blast, so that the improving locality which the Trent and Auckholme Railway has just opened up will be able to take rank with the first iron-making districts of England. With ironstone of a quality superior to any that can be found, raised from the surface, in some places being fully 24 ft. deep, with the top remarkably rich in manganese, there is no reason why the Trent should not become one of the first centres for the manufacture of iron in England. At the present time the Frodingham Company are finding a market for their produce at nearly 15 per cent. advance on that paid in any other district in the county.

The enquiry for coal in South Yorkshire continues good, the Silkstone in particular being in good demand, not only for the metropolitan markets, but for the cotton districts in Lancashire. There is also a heavy tonnage being sent to Hull and Grimsby for exportation, the Anglo-French Company at the last-named port being just now about the best customers. For the North of Europe large cargoes are being taken out, the cessation of the war having stimulated purchasers for the winter season. In the same district there has been some disagreement between the masters and the workmen, which has led to a strike at the North Gawber Colliery. Two men having been put to work in one who had been working previously, a demand for an advance of 6d. per dozen corves, which contains 4 tons 1 cwt., was demanded. The proprietors of the colliery alluded to, the North Gawber, offered 4d. per dozen, which was refused by the men, who at once struck. The Miners' Association, at a meeting on Monday night, endorsed the action of the men, and came to a resolution to support them, should their demand not be conceded. At the present time they are, therefore, on strike, and as the association now numbers some 5000 members, they are in a good position to support some 300 or 400. In fact, it would appear to be the advantage of the association to have a strike or disagreement on hand, as they are by that means enabled to show their power.

The action brought by the widow Holmes against Mr. John Rhodes, of the Woodthorpe Colliery, Sheffield, has terminated in a verdict for the widow, with 160/- damage; and the censure by the jury of Mr. Charles Morton, the Government Inspector of the district, for neglect of his duties. The widow claimed compensation for the loss which she sustained from the death of her husband, which was caused by the defendant's negligence. On May 10, 1865, deceased was engaged in the colliery in question, and while he was walking up one of the planes a train came down without any previous signal having been given, and as there was no place of refuge near he was killed on the spot. For the plaintiff, it was contended that the defendant was liable on two grounds; because there were not sufficient signals in the mine, and because places of refuge had not been provided (at a distance not exceeding 20 yards from each other), in conformity with the Act of Parliament. Witnesses were called to show that the Act had not been complied with. Mr. Chas. Morton said that he inspected these mines about three years ago, and noticed that in various parts of the inclined plane the refuge places were not sufficient in number, and he recommended that the inclined planes should be made wider, and that more refuge places should be provided. Up to the time of the accident this had not been done. To the non-legal mind the views of the judge (Mr. Justice Lush) appear really extraordinary; he told the jury that they would have to decide two questions—first, did the defendant provide a sufficient number of refuge places; and if not, looking at the means within the reach of the deceased, were they of opinion that as a reasonable and prudent man he could have avoided the injury, although there was no place of refuge to run to. As it happened, the jury gave a verdict which accords with what most persons consider justice, but surely it can scarcely be a proper direction for a judge to instruct a jury that, although by special Act of Parliament colliery owners were bound to provide places of

refuge, because such places were considered necessary to safety, the colliery owner will not be liable for damages for neglecting the Act, if the jury be of opinion that the injury could be avoided by any other means.

Amongst the vast works promulgated is a scheme by Mr. Duncan, the water engineer to the Liverpool Corporation, to obtain a supply of water from the Bala Lake, in North Wales, at a cost of 1,500,000/-, a sum less by 500,000/- than the cost of the Rivington Works. The subject has been left open for a report from an eminent engineer as to the present supplies, before entering on a more extensive scheme. There is no doubt that the scheme will follow the one promulgated about a year since by the engineer to the Corporation of Hull, who proposed bringing the water from the Cumberland Hills through the principal towns of Yorkshire and Lancashire, at a cost of some 11,000,000/- or 12,000,000. The scheme was a comprehensive and vast one, but still one that was in every way feasible, although the cost is of a rather alarming character, and, therefore, not likely to meet with many advocates.

FOREIGN MINES.

PESTARENA GOLD.—T. Roberts, T. Warne, Aug. 10: The amalgam our last remittance in June has been smelted, and has surpassed considerably our expectations, having produced 818 ozs. of fine gold, leaving a large profit for the two months. The value of the remittance is about 2650/- The average yield of the ore has been above 2 ozs. of gold per ton. The average quantity of ore daily treated by the native mills has been only 6 $\frac{1}{4}$ tons. The ore continues abundant. The drawing and specifications for the new hoisting machinery have been sent to Messrs. Harvey and Co. for estimates.

VALLANZASCA GOLD.—J. Roberts, Aug. 8: Although the extraordinary difficulties under which we laboured during the last two months, through the war, and which are still continuing, produced a loss of time in the running of the new mills, as we reported, we are pleased to inform you of the remittance to the office of 386 ozs. fine gold, of the value of about 1150/- obtained since our last meeting in June. The new mills continue to give great satisfaction, and you may depend upon the regular continuation of gold remittances. The stopes are as productive as ever in average ore. We hope to report during next month some important improvements at several points now being opened on.

VAL ANTIGORIA.—Aug. 11: The two new mills now at work continue to give full satisfaction. The amalgam produced has been smelted, and has given 25 ozs. of fine gold, of the value of about 112/-, forwarded to the office. This trial having given most satisfactory results, we urge upon you to provide for the necessary outlay for the construction of the hoisting machinery, and of at least ten more new mills, which could be, after their completion, easily supplied with ore, and would produce profitable returns. According to your request, the construction of the plant is at present suspended; we fully believe, however, that as soon as the projected improvements can be carried out, and a sufficient quantity of ore treated daily, this mine will show highly satisfactory and permanent results. We have reason to believe that we shall have the pleasure to report soon a discovery of very rich ore near the adit end north. The lode in the 20 end south continues large.

VAL TOPPA.—William Jenkins, Aug. 10: Piedimulera: The supply of water from the Marmazza was good during the month of June, but had become so small during the past month, that while we were able to run all the native mills during the first month, we had to suspend the working of nearly half this number during July. Notwithstanding this, the gold returns which we forward to the office are most satisfactory, being 280 ozs., of the value of about 1000/-, the ore from Fisher's level having yielded 1 oz. 11 dwt. of gold per ton. It will give you pleasure to hear that during this month our former and present difficulties as to the water supply will come to an end. The first section of the establishment (being 10 new mills) will, we fully expect, commence working before the end of the present month, when our gold returns will immediately increase. The establishment being situated, as you know, on the River Anza, we shall have hereafter a permanent and great water-power at our disposal. The new shoot and the bridge over the Marmazza are nearly completed, and we expect to commence the carriage of ore to the establishment over the new road on August 20. The lode in the Marmo Rosso stopes continues rich, and has increased 8 feet in width. We are anxious to have your consent as soon as possible for the completion of additional 10 mills, after the first 10 shall have been started, as we shall have no difficulty in supplying those also with ore.

CHONTALES GOLD AND SILVER.—W. C. Paul, July 7: Consuelo: The lode in the shaft, sinking from surface, is about 2 ft. wide, producing a little gold, which will pay to grind. The cross-cut, driving to intersect the rich part of the lode, progresses very slowly, the ground being hard. I hope this will soon become more favourable for driving, from present appearance and indications. The erecting of machinery has been much retarded, owing to the heavy rains having made the roads bad for drawing in timber from the woods; the roads are now repaired, and in permanent good condition, as far as finished, and we hope soon to resume bringing in the timber for the machinery, and to have them in a forward state in two months hence. One old mill is repaired and ready to work, and we are now laying a tramway to bring the ore to it, which will be completed by the end of this month. Estrellita: The adit level, driving west on Consuelo lode, is now producing saving work throughout, and will yield on an average 1/2 oz. of gold per ton; the lode is 6 feet wide, and looks promising for further improvement shortly.—San Antonio: The levels and shafts in this mine have been properly secured, and the water-course to the mill and the cart-road for bringing ore to the mill nearly completed, and I hope to have it grinding in the course of a few days.—Santo Domingo: The sinking of the shaft here has been stopped for the past fortnight, in consequence of bad air. An air-machine is now in course of making, and we hope to resume it again in the course of the week. The lode is still of the same cheering description, and I fully anticipate good results at this place. One mill is ready to grind, and another in course of erection, which will be finished about the end of the month. The water-course is being cleared, and as soon as possible we shall commence laying down a tramway for bringing the ore to the mills; in the meantime we shall adopt the old method of bringing it in bags on men's backs. The cross-cut to the lode at a deeper level still progresses, but rather slowly, owing to bad air, for the present, we cannot alter, having no timber sawn with which to make our pipes etc.—Trinidad: Here we have commenced driving a level from the foot of the hill on the course of the lode east; even at the surface, where mixed with great quantities of clay, the lode is large, and yields on an average 1 oz. per ton. The driving of this level has been contracted for at \$5 per varas, equal to about 20/- per fathom, the contractor providing timber, &c.—San Felipe, near Santo Domingo sett: Here we are driving a level east on the lode, which is very large, and in another part of the sett produces first-rate samples of silver and gold ore; in the present level it produces a small quantity of each, but not to value.—Perez, or Cabayales of Javall: Here a level is being driven east on the Javall lode, producing paying ore to grind, but not rich; the lode is very large, cannot say the size as yet. A shaft is being sunk on the same lode, 300 varas east; the lode is large, producing good ore for both gold and silver—a promising lode, We are also sinking a shaft at the extreme eastern boundary on this lode, but are not down deep enough to say the size or quality as yet.—Plantel Pavon: Here we have built two good houses, and planted several acres of corn and plantains, which will be of great service during the present rainy season.—Pital Runsh, on the plains: Here we have planted 20 acres of corn, and about 10 acres of plantains, all of which are doing well. A good house for storing of goods on transit to the mines is completed, and large enclosure for keeping cattle, stables for mules, and proper fences are now being put up to keep all secure. This place is of great importance and advantage. The transit of machinery is going on slowly, but with the addition of some oxen, which I have sent to purchase, I shall endeavour to get in enough of the heavy machinery to put one 40-wheel to work during the next three or four months. Some of the heavy parts of the saw machine have to-day got so far as the "Runsh" since my leaving Acayapo on Monday. I am now in hopes of getting up what I must require to carry me through the winter months, in return to something near my former anticipations. Every endeavour will still be used to give you satisfaction in future returns.

—Samuel Mekins, Santo Domingo, July 6: In presenting you my monthly report, I beg to say that general operations of the mine are progressing favourably. The officers' residence is so far completed that Dr. Robinson has removed into it, and most likely the other officers will follow in a week or two. A large store is being erected, 60 ft. long and 25 ft. wide, the upper part of which will be for sleeping apartments for the Cornishmen, and will make a very healthy and comfortable place. An American residence is also in course of erection. The axes and wood for caps and cog-wheels for the improvement of Santo Domingo mill are cut and prepared, and nearly ready for fixing, being daily pressed with all possible speed. The Santo Domingo shaft has not been continued all the month, the men not being able to work in consequence of bad air. This shaft is now 5 $\frac{1}{2}$ fms. deep, and will be resumed shortly, as an air-machine is in course of construction, and nearly finished. The lode at the shaft is of the same size and character as when last reported. The cross-cut below is driven 17 $\frac{1}{2}$ fathoms by four men, and will shortly intersect the lode. At Trindad a level has been driven on the course of the lode 4 fms., the lode not being well defined so near the surface, but producing gold. A little further south another lode has been opened on a very strong lode, 8 ft. wide, producing silver and gold, but not of great value. At Paron operations have been commenced on a lively scale. Four men are cutting down and securing Paron shaft, which is about 3 fms. deep; the lode at this shaft is from 10 to 12 ft. wide, and of a splendid character, producing gold. Another shaft, about 700 yards east of the Paron shaft, and on the same lode, has been resumed. This shaft is about 2 fms. deep, the lode being of the same size and character as at the Paron shaft, and sinking by four men. At the western boundary of the Paron, and opposite the Javall Mine, an open cutting has been commenced by two men. The lode in this cutting, being so near the surface, has not assumed its proper size and character, but we expect something very good here shortly, as the Javall party have some good ground near their boundary. About midway from the Paron shaft and the western boundary two men have commenced sinking a shaft to prove this piece of ground, and not much can be said of this, as we have only just commenced. The native labourers, under an overseer, are making roads, erecting houses, cutting down trees, and clearing the premises, which in a very short time must become one of the most valuable properties in the neighbourhood.

—J. White, Consuelo Mine, July 6: I beg to hand you my report on the Consuelo, Santo Domingo, and Estrella Mines:—The ground in the cross-cut advancing east, 11 $\frac{1}{2}$ fms. from the base of the hill, has been throughout the month of a hard and close textured formation, similar to when last reported on, but somewhat changed in composition, partaking more of a green felspathic granite. In the present end we have intersected a smooth breasting, running at right angles with the level, exhibiting every encouraging feature of a more feasible rock for exploring, and a congenial matrix for productiveness of the lode when cut. In the shaft sinking below No. 2 level the lode is 20 in. wide, charged with magnetic iron, quartz, clay, and gold, but not sufficient of the latter to value; the stratum is of the best description as a mineral-bearing one, and favourable for progress in getting downward. Consider the appearances, as a whole, are of a very promising character for yielding gold shortly. The men here have been engaged occasionally in securing some parts of No. 2 level. The sinking of the new shaft on the immediate top of the hill has progressed as satisfactorily as the time would admit, and preparations are now being made for timbering the same in a permanent and safe manner, in order that we might proceed below uninterrupted; now being worked by two Englishmen.—Surface: The drawing of timber from the forest for machinery, the water-wheel, pit, and some other surface operations, have been for the greater part of the past month, and are at present suspended, in consequence of the extreme necessity for applying all the available labour to re-making the road and bridges between this mine and San Domingos, and which we have succeeded in laying in a good substantial and

permanent manner for about one-half of the distance.—Estrella Mine: The lode in this level, driving west, has been hitherto unproductive, but in the present frontage it is full 5 feet wide, bearing abundance of magnetic iron, quartz, clay, and gold, containing of the latter about 1/2 oz. to the ton of ore. I continue to entertain the most favourable opinion of this lode yielding very satisfactory results at no great distance farther in the hill. Operations here are, as you are aware, suspended for the present, in consequence of requiring the men to put in order the water-course at San Antonio Mine.—Surface: It is intended at the earliest practicable moment to commence and lay down a line of tramway, to economise the cost in carrying the auriferous ore to the mill, the continuation of which to San Domingo and Consuelo is at present under contemplation; rails of sleepers wood are being prepared 4 in. by 3 in.—San Antonio Mine: The operations carried out here throughout the past month consist in the securing of certain portions of the interior of the mine and water-course, which were in a delapidated state. San Antonio shaft has been secured and permanently timbered 3 fathoms under the surface, No. 2 level 2 fathoms, and No. 3 level 7 fathoms in length. The repairing of the water-course attached to the crushing-mill has progressed as satisfactorily as can be expected under the circumstance of the heavy falls of rain. A clearing of 133 yards in length, to 3 ft. 6 in. wide, has been effected, and the same strongly secured with timber; there remains 59 yards more to complete the whole distance, and which will in all probability be accomplished in two or three days. The mill and its connections are being prepared as speedily as possible, and will be in readiness for action by the time the water can be brought to bear on it. The large rancho, contracted for by Jose Les Palacios, for the sum of 250 hard dollars, is progressing favourably, and I fully anticipate its completion at the stipulated time.

CENTRAL AMERICAN.—Alotenque, June 30: San Pantaleon Mine: In the end of San Alfonso deep adit level, driving east, the lode is 1 $\frac{1}{2}$ foot wide, composed of carbonate of lime, mixed with porphyry and spots of ore, but not enough to value; the ground is a little harder than last reported. The lode in the end of Guadalupe level (10 fathoms below San Alfonso), driving east, is much improved; it is 1 $\frac{1}{2}$ foot wide, composed of flookan and calc-spar, with good pockets of argiferous blonde, worth 1 ton in a fathom. This level is now under Quejada's winze, which will be resummed to communicate with San Alfonso and Guadalupe levels, after which a stoppage will be opened in the back of the latter level. The lode in the stopes east and west of No. 2 trial winze, below Guadalupe level, has become unproductive, and the stopes are suspended. In the stopes east and west of Trigono's winze, below San Alfonso level, the lode is worth 25 cts. of low quality silver ore per fathom; and in the stopes east and west of Lemus's winze, above San Alfonso level, it is worth 15 cts. of ore per fathom. The east bank east of No. 3 cross-course has been opened on 3 varas, and will be further proved to ascertain its correct bearing and underlie. The estimated raisings for June from San Pantaleon Mine will probably equal, if not exceed, the calculation of 17 tons, but the ore will not be of high ley.—San Carlos Mine: In Cerna's cross-cut, driving south towards Carrera's lode, good progress has been made in the past month; this level is being driven at the rate of about 10 fms. a month. The ground in La Esperanza adit level, driving west from the eastern slope of the hill, is still disordered, but with a branch in the end, which Captain Butler thinks to be Carrera's lode. The lode in the stopes below San Rafael adit is worth 25 cts. of fair quality silver ore per fathom, and in those above San Rafael 22 cts. of ore per fathom. In the stopes east and west of Garcia's winze the lode is split into branches, worth together 22 cts. of ore in a fathom; ground hard. East and west of Mistun's rise the lode in the stopes is worth 15 cts. of low quality silver ore per fathom; and in the stopes east and west of Garcia's winze the lode is split into branches, worth together 22 cts. of ore in a fathom; ground hard. In the stopes below La Esperanza level, east of Manuel's winze, the lode is small, but will yield 15 cts. of ore in a fathom. The cross-cut east of Mistun's rise, the lode, is worth 10 cts. of ore in a fathom. The cross-cut south, towards the new lode, has been driven 10 varas, and a branch, composed of soft white porphyry, quartz, carbonate of lime, and rich stones of argiferous blonde, has been found: the driving will, however, be continued a few varas further south for better proof. The ore from this lode much resembles that from La Esperanza level. The dressing-floors at the mouth of La Esperanza level have been supplied with a good roof, sheltering the dressing-pans from the rains. The raisings for June were expected to reach the estimated quantity—35 tons for five weeks.

ATUTILCA MINE.—In this mine during the past month some good stones of galena have been broken from the shallow adit level, on the slide lode, but they do not contain much silver. The end has reached old workings, of whose history nothing is known. The men are put to work in the bottom of the level, where some small arches of ground were left by the old workers. The Atutilca lode, in the deep adit level, driving west, having become small, and the ground hard, the driving on it is suspended, and the men put to drive west on the slide lode, which has now a more promising appearance, composed of calc-spar, flookan, and iron pyrites. The estimated raisings of ore for July (four weeks) are:—From San Pantaleon, 12 tons; from San Carlos, 29 tons; from Atutilca, 1 ton; total, 42 tons, which, at 70 ozs. per ton, would contain 2940 ozs. of silver. At the 28, west of Perez's shaft, the

CONSOLIDATED COPPER MINES OF COBRE.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the proprietors of this association will be HELD at the offices of the company, Gresham House, Old Broad-street, in the City of London, on TUESDAY, the 21st day of August inst., at One o'clock in the afternoon precisely, for the purpose of confirming certain resolutions passed at a special general meeting of the proprietors of the association, held on the 31st day of July, 1866.

Dated August 2, 1866.
H. R. GRENFELL, Directors of the
WALTER SHAIRP, Company.

CONSOLIDATED COPPER MINES OF COBRE.—At a Court of Directors of the Company of Proprietors of the Royal Copper Mines of Cobre, held on the 2d August, 1866.

In pursuance of the 28th clause or section of the company's Deed of Settlement of July 13, 1855, and the 1st, 2d, 3d, and 4th resolutions of the Special General Meeting of the company held the 31st July last, the Court of Directors of the company hereby resolve and order as follows, that is to say—

1.—That the nominal amount of the capital of the company shall be and is hereby increased for the general purposes of the company from £180,000 to £600,000, by augmenting rateably the amounts of the 12,000 now existing shares thereof, so that every now existing share of the nominal amount of £40 shall be and is hereby augmented by the sum of £10, so as to be of the nominal amount of £50.

2.—That the additional £10 a share is hereby made payable and shall be paid by instalments, as follows, that is to say—

(a).—There shall be payable and paid on the 15th day of October, 1866, a first instalment of £10, a share.

(b).—The remaining £9 10s. a share shall be payable and paid by such and so many instalments, each of no more than £2 a share, as the court from time to time appoint and call up, but so that there be an interval of at least two calendar months between the days for the payment of two successive calls.

(c).—The first instalment of £10, a share shall be paid to the credit of the company with their bankers, Messrs. Glyn, Mills, Currie, and Company, at their banking-house in Lombard-street, in the City of London, and the subsequent calls shall be paid at such places and in such manner as the court from time to time appoint.

3.—Every person who at the time of the passing of these resolutions is the holder or bearer of the certificate or certificates of any share or shares, is, in accordance with the Company's Supplemental Deed of Settlement of Nov. 24, 1866, the proprietor of the share or shares, and his executors, administrators, and assigns, shall be liable, and are hereby bound, to pay in respect thereof the additional £10 a share, in accordance with the second of these resolutions.

4.—Notice of these resolutions shall be given to the proprietors in accordance with the company's regulations now in force.

H. R. GRENFELL, Directors of the Company.

Dated 2d August, 1866.
WALTER SHAIRP, Directors of the Company.

SILVER BROOK MINING COMPANY (LIMITED).

SILVER-LEAD MINE, Capital £8000, in 400 shares of £20 each, of which 305 are already allotted, £2 per share to be paid on allotment; calls not to be made at less intervals than three months.

Incorporated under the Companies Act, 1862.
DIRECTORS.

THOMAS J. R. YATES, Esq., Bridgford, near Stafford.
HENRY JOHN PELLIW, Esq., Windlebury, Surrey.

ERNEST GEORGE FELLOWE, Esq., Surbiton, Kingston, Surrey

(With power to add two to their number).

BANKERS.—The Metropolitan and Provincial Bank (Limited), Cornwall, E.C.
AUDITOR.—Jas. F. Quarterly, Esq., accountant, 37, Queen-street, Cannon-street, E.C.

SECRETARY.—Mr. J. W. Marshall.

OFFICES.—No. 55, GRACECHURCH STREET, E.C.

This company has acquired an extensive mineral property, situate in the parishes of Mothev and Llanddansant, in the county of Carmarthen, for the purpose of working the same and raising therefrom lead, silver-lead, or other mineral substances found therein, and of making the same marketable for disposal.

Samples of the ore recently broken from the mine may be seen at the offices, and inspection is invited.

A full prospectus, with report and every information, will be given to intending investors, and the directors are now prepared to receive applications for the few remaining shares, at £10. per share premium.

THE WEST GREAT ST. GEORGE COPPER MINING COMPANY (LIMITED).

Incorporated under the Joint-Stock Companies Act, 1862, whereby the liability of shareholders is limited to the amount of their shares. In 6000 shares, of £5 each. £1 payable on application, and £1 on allotment.

If no allotment be made the deposit money will be returned.

Capital £30,000, of which a large proportion is subscribed by the following shareholders:—

JOHN CROSSLAY, Esq. { (Messrs. John Crossley and Sons, Limited, Halifax).
JOSEPH CROSSLAY, Esq. { (Messrs. John Crossley and Sons, Limited, Halifax).
R. WATSON, Esq. { (Messrs. J. Watson and Brothers), Church, Accrington.
HENRY AMBLER, Esq., Watkinson Hall, near Halifax.
F. APPLEY, Esq., Appleby House, railway contractor, Manchester.
JOHN APPLEY, Esq., merchant, Manchester.
LEO LOEWENSTEIN, Esq. (Messrs. Leo Loewenstein and Co.), Manchester.
J. VOILE, Esq., Birmingham.
CHARLES CLAY, Esq., M.D., Piccadilly, Manchester.
BANKERS.—The Manchester and Liverpool District Banking Co., Manchester.
MESSRS. Roberts, Lubbock, and Co., London.
MESSRS. Willyams, and Co., Truro, Cornwall.

SOLICITORS.—Messrs. Sale, Worthington, Shipman, Seddon, and Sale.

AUDITORS.—Messrs. Worthy Williams and Co., Manchester.

SECRETARY.—Mr. Hugh Fleming.

SHAREBROKERS.

Messrs. R. C. Clifton and Co., Aldine Chambers, Princess-street, Manchester.

RESIDENT AGENT.—Captain Walter Thomas, Redruth, Cornwall.

REGISTERED OFFICES OF THE COMPANY.

YORK CHAMBERS, KING STREET, MANCHESTER.

Applications for shares must be addressed to Messrs. R. C. CLIFTON and Co., the sharebrokers to the company; or to Mr. HUGH FLEMING, the secretary.

NOTICE.—CAPT. S. M. RIDGE, of LLANIDLOES, MONTGOMERYSHIRE (late manager of the Brynpant and Cwm Fron Mines, and others, in Shropshire and Wales), is NOW OPEN TO INSPECT AND FAITHFULLY REPORT UPON ANY LEAD MINE IN either of these localities that may be confided to his care, having had better than 30 years' experience in lead mining, as miner and agent.—Address, Capt. S. M. RIDGE, Llanidloes, Montgomeryshire.

CAPT. J. RABEY OFFERS FOR SALE FIFTY SHARES, at the nett price of £3 per share, in the CAI-R-PANT MINE, joining the great Minera Mine, and one of the best prospects in the district, being all whole ground, and the mine paying for itself now at the shallow depth of 40 yards.—Address, Capt. J. Rabey, Coedpoeth, near Wrexham, Denbighshire, North Wales.

CAPT. RICH. BOLMIN, CORNWALL, being in the centre of the mining districts of Devon and Cornwall, and having had 25 years' experience in the management and inspection of mines, OFFERS HIS SERVICES TO INSPECT AND REPORT ON MINES in either of the above counties. Orders promptly attended to.

R. O B E R T L I B B Y A N D S O N , MINE AND SHAREDEALERS, &c., CAMBORNE, CORNWALL.
NEW LOVELL.—We recommend the immediate purchase of these shares, as the mine has considerably improved of late, and adjoins the famous rich East Lovell. For particular, apply to R. LIBBY and SON.

Mines inspected by competent agents.

BOGHEAD CANNEL.—MR. JOHN MACKENZIE, late GOVERNMENT INSPECTOR OF COAL FIELDS, having resigned his appointment to TAKE UP HARTLEY BOGHEAD CANNEL in NEW SOUTH WALES, yielding from 100 to 150 gallons of oil per ton, IS READY TO TREAT WITH ENGLISH CAPITALISTS either for WORKING, LEASING, or SELLING ONE OF THE SECTIONS, for making refined oil for colonial and foreign use.

Extent and position of deposits can be ascertained from plans and particulars deposited at the MINING JOURNAL office, 26, Fleet-street, London; and plans, sections, photographs, and specimens will be forwarded on application to Mr. MACKENZIE, Civil Service Club, Sydney, New South Wales.

Cost price of making and delivering refined oil in Sydney is proved to be about £1. 9d. per gallon. The deposits being isolated patches, competition is to a certain extent limited.

M. R. GEORGE DARLINGTON, CONSULTING MINING ENGINEER (Graduate of the Royal School of Mines), GROVE PARK, WREXHAM.—MR. DARLINGTON IS OPEN TO ACCEPT ENGAGEMENTS TO REPORT UPON, MODEL, OR ARRANGE MINES OR MINING WORKS, and from his practical and varied experience in all kinds and classes of mines, both abroad and at home, especially on the Continent, in America, and in Australia, he can confidently offer his services to those who may require faithful reports or examinations of mining properties at home or abroad. MR. DARLINGTON speaks French and German fluently, and is acquainted with the mining laws of those countries.

NOW ready, price 5s., post 5s. 4d.,
THE MINES OF CORNWALL AND DEVON:
STATISTICS AND OBSERVATIONS, for 1865.

By THOMAS SPARGO, Mining Engineer, Stock and Sharebroker, Gresham House, Old Broad-street, London, E.C.

RAILWAYS AND MINES.—Capitalists who seek safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the bona fide merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the Money Market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range of profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £10 to £15 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to Railways and Mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninformed in selecting mines for investment.

MESSRS. TREDENNICK AND CO., No. 78, LOMBARD STREET, LONDON, E.C.

CWM RHAYADR MINE LEASE AND PLANT TO BE DISPOSED OF.—Immediate possession can be given. There are several lead ore veins traversing the estate. Further particulars can be obtained, and to treat, to "H. D.", Post-office, Ruabon, North Wales.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WORKAS DOWNS MINING COMPANY.—By the direction of His Honour the Vice-Warden, notice is hereby given, that on Tuesday, the 28th day of August inst., at the Registrar's Office, at Truro, in the county of Cornwall, at Eleven o'clock in the forenoon, this Court will PROCEED to MAKE a CALL of FOURTEEN SHILLINGS PER SHARE on all the contributors of the said company settled on the list of contributors under Class A.

All persons interested therein are entitled to attend at the time and place aforesaid to offer objections to such call.

WILLIAM MICHELL, Registrar of the said Court.

Dated Registrar's Office, Truro, August 11, 1866.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the GREAT WHEAL GRYLLS MINING COMPANY.—By the direction of His Honour the Vice-Warden, notice is hereby given, that on Tuesday, the 28th day of August inst., at the Registrar's Office, at Truro, in the county of Cornwall, at Eleven o'clock in the forenoon, this Court will PROCEED to MAKE a CALL of FOURTEEN SHILLINGS PER SHARE on all the contributors of the said company settled on the list of contributors under Class A.

All persons interested therein are entitled to attend at the time and place aforesaid to offer objections to such call.

WILLIAM MICHELL, Registrar of the said Court.

Dated Registrar's Office, Truro, August 11, 1866.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the EAST POOL.—SOUTH WHEAL FRANCES, WEST WHEAL FRANCES, WEST WHEAL SETON, WHEAL GRENVILLE, EAST WHEAL GREENVILLE, GREAT WHEAL BUSY, NORTH ROSKEAR, ROSEKNOWETH, SOUTH WHEAL CROFTY.

THE FALMOUTH DOCKS, AND FALMOUTH HOTEL.

AUGUST 21, 1866.
MPUBLIC AUCTION, at Tyack's Hotel, in Camborne, on Tuesday, the 21st day of August, at Three o'clock in the afternoon, SHARES in the following (DIVIDEND and PROGRESSIVE) MINING and other COMPANIES, viz.:—

S. IVES CONSOLS
SOUTH WHEAL TOLGUS
EAST WHEAL TOLGUS
WEST WHEAL TOLGUS
WEST WHEAL SETON
WEST WHEAL DAMSEL
SOUTH WHEAL SETON
WHEAL MARGARET
TRUMPET CONSOLS
NEW TREVENEN
WHEAL CURTIS
THE FALMOUTH DOCKS, AND FALMOUTH HOTEL.

With a little advance in the price of tin and copper, several of the above mines (not already leaving profits) will, doubtless, pay large dividends.

VALUABLE MINING MACHINERY AND MATERIALS FOR SALE, 29TH AUGUST instant.

MESSRS. KINSMAN AND HOCKADAY have received instructions to SELL, BY AUCTION, at CORNUBIA MINE, in the parish of Roche, near St. Austell, Cornwall (subject to conditions to be then and there produced), the whole of the MACHINERY and MATERIALS thereon, comprising—

A 50 ft. CYLINDER PUMPING ENGINE, 9 and 8 ft. stroke, with TWO BOILERS 10 tons each, in excellent condition.

A 24 in. CYLINDER STAMPING ENGINE, 7 ft. stroke, with 10 ton BOILER, and 24 heads of stamps, with iron axes, fly-wheel, &c., all complete and equal to new.

A 30 ft. DIAMETER CAST-IRON WATER-WHEEL, 2½ ft. breast, with double-acting WINDING MACHINE, recently erected now, head launders, &c., all in good condition.

30 ft. of bucket pitwork, ranging from 8 to 10 in. bore, with bucket rods, flange pins, rings, &c.

70 fms. of 13 in. forcing lift, in two plunger bottoms.

12 fms. of 12 in. drawing lift.

7 fms. of 16 in. ditto.

216 heads cast-iron stampaxles, new Capstan shears and shives complete.

Bat-rod shaft.

Other shears, with shives complete.

1 pt. bob, with connecting rods, and about 20 fms. of 1½ in. flat-rods; a quantity of other flat-rods, of different sizes; wrought-iron angle bob; a large number of pulleys of various sizes, adapted for mining and clay works purposes; several sets of shaft head gears, railway iron, saddle and rangers, 2-horse whisks, steam and horse whim kibbles; dressing-hoops, complete in all the appliances in the mines, consisting of drags, round and hand bundles, tin frames, kieles, and dressing tools; smiths' bellows, anvil, and an assortment of smiths' and miners' tools; a large quantity of launders of various sizes; a very excellent drying tube, affording about 30 by 9 ft. of heating surface, with brickwork and drying-house furniture in chests, framing, and other internal fittings; a quantity of new and old wrought and cast scrap iron, a number of new and useful barrows, a quantity of new and old timber, stones, bricks, some articles of account-house furniture, several good wood sheds, and a quantity of fire-wood, &c.

To view the quarries, application to be made to Mr. JOHN JONES, Llanberis; Messrs. RAWLINS and ROWLEY, solicitors, Birmingham; and Messrs. CHURTON and ELPHICK, auctioneers and land valuers, Chester, from all of whom printed particulars and conditions of sale can be obtained; also of Messrs. CLARKE, Woodcock, and RYLAND, 14, Lincoln's Inn-fields, London; and at the principal hotels and inns in Manchester, Liverpool, Chester, and Llanberis and the neighbourhood.

CLARKE, WOODCOCK, AND RYLAND, 14, Lincoln's Inn-fields (Agents for Rawlins and Rowley, Birmingham, Plaintiffs' Solicitors).

CARMARTHENSHIRE, SOUTH WALES.

TO RAILWAY COMPANIES, CONTRACTORS, AND OTHERS.

MR. ROBERT HOW has been favoured with instructions to SELL, BY AUCTION, at the Railway Station, Carmarthen, on Friday, Aug. 24, 1866, TWO very powerful BROAD GAUGE LOCOMOTIVE ENGINES, of superior construction, and but recently built, by Messrs. Rothwell and Co., Bolton. Also, a small but very useful BROAD GAUGE ENGINE.

The engines, which will be sold singly, may be inspected at Carmarthen station, where all information respecting them may be obtained.

Conditions will be produced at the sale. Sale to commence at Three P.M.

Catalogues will be forwarded on application to the Auctioneer, Althallow Chambers, No. 49, Lombard-street, London, E.C.

DATED AUGUST 14, 1866.

CHESHIRE.
RE THE MOTTRAM ST. ANDREW MINING COMPANY (LIMITED).
SALE OF PLANT, ENGINE, MACHINERY, STOCK, &c., two miles from the Alderley Edge Railway station.

MR. BROADHURST begs to announce that he has received instructions from the liquidator of the above-named

PATENT FLEXIBLE TUBING,
AND BRAISTICE CLOTH FOR MINES,
MANUFACTURED BY
ELLIS LEVER,
PATENTEE,
WEST GORTON WORKS, MANCHESTER.

TAVISTOCK IRONWORKS AND STEEL ORDNANCE
COMPANY (LIMITED).
(LATE GILL AND CO.)
ENGINEERS, IRON AND BRASS FOUNDERS,
MANUFACTURERS OF
STEAM ENGINES, BOILERS, AND MACHINERY OF ALL KINDS.
CHAINS, SHOVELS, EDGE TOOLS, AND EVERY DESCRIPTION OF CAST
AND HAMMERED IRON FOR MINING, MANUFACTURING,
RAILWAY, OR AGRICULTURAL PURPOSES.
Machinery sent to all parts of the world.
Foreign mining companies supplied on liberal terms.

RAILWAY CARRIAGE COMPANY (LIMITED)
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, and EVERY
DESCRIPTION OF IRONWORK.

Passenger carriages and wagons built, either for cash or for payment
over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES.—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES.—6, STOREY'S GATE, GREAT GEORGE STREET,
WESTMINSTER.

RAILWAY WAGON WORKS, BARNSLEY.—
CRAIK BROTHERS ARE PREPARED TO SUPPLY COAL and COKE
WAGONS OF EVERY DESCRIPTION, either for cash, or by deferred payments
through wagon-leasing companies.

THE METROPOLITAN RAILWAY CARRIAGE AND
WAGON COMPANY (LIMITED).
SALTLEY WORKS (BIRMINGHAM).
Successors to Messrs. JOSEPH WRIGHT and SONS.

MANUFACTURERS OF RAILWAY CARRIAGES, WAGONS, and RAILWAY
IRONWORK of every description.
RAILWAY CARRIAGES and WAGONS built for CASH, or upon DEFERRED
PAYMENTS EXTENDING over a period of from THREE to TEN YEARS.

A large number of COAL, IRONSTONE, BALLAST, and other WAGONS to
be LET ON HIRE.

MANUFACTORY AND CHIEF OFFICES—SALTLEY WORKS, BIRMINGHAM.
LONDON OFFICES—No. 8, ADAM STREET, ADELPHI, W.C.

THE BEVERLEY IRON AND WAGON COMPANY
(LIMITED).
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, WROUGHT
and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED
USES, and HEAVY SMITHS' WORK for ENGINEERS, &c., BRASS and
IRON FOUNDERS, MAKERS of PORTABLE FARM RAILWAYS, TURN-
TABLES, CROSSINGS, SWITCHES, &c., AGRICULTURAL MACHINISTS,
MANUFACTURERS of FIELD, ROAD, and BARN IMPLEMENTS, PATENT
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VALVES—for Marine and Land Engines' Steam Packing, sheet or roll.
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COAL CUTTING MACHINERY.—
The WEST ARDSLEY COMPANY having, by recently patented improve-
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The results of twelve months' experience in the working of these machines, by
the West Ardsley Company, have proved most satisfactory, their use being found to
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NOTICE.—The WEST ARDSLEY COMPANY, having reason
to believe that their patents are being infringed upon, hereby give notice
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who may MAKE FOR SALE, or USE ANY MACHINERY in the construction
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The extended use of this material has enabled the manufacturers to issue
a new List, showing a LARGE REDUCTION IN PRICE; and they now beg to
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From the very best quality of charcoal iron and steel wire.

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MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL
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WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD
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SAFETY FUSE MANUFACTURERS,
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SALOM'S NEW OPERA and FIELD GLASS, and the
"RECONNOITERER" GLASS, price 10s. 10d., sent free.—This TOURIST'S
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THE MINING JOURNAL.

IMMENSE SAVING OF LABOUR.
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT
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FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:

The Parry Mines Company, Parry Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Moreton reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.

For the Parry Mining Company, JAMES WILLIAMS,

H. R. Marsden, Esq.

Ecton Energy Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaw, about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.

H. R. Marsden, Esq.

THOS. GOLDSWORTHY & SONS.

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Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stones and quartz.

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Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust.

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WM. G. ROBERTS.

General Fremont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your Invention is shown by the fact that Mr. Park has just ordered a third machine for this estate.

SILAS WILLIAMS.

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CAST STEEL for PUNCHES, TAPS, and DIES,
TURNING TOOLS, CHISELS, &c.
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Boring Tools of every description, for Testing Ground and for Artesian Wells.

Improved Double-action Pumps.
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Their adoption not only adds to the steam-producing power of the flues, and renders the practice of hooping with angle or tee iron rings quite unnecessary.

The tubes have now been in use upwards of 14 years, and above 22,000 are in use in various parts of the country, with the best results.

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THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Pershare.	Last paid.
1500 Alderley Edge, c. Cheshire*	10 0 0 ..	—	8 7 8 ..	0 10 0 ..	Aug. 1866		
200 Botallack, t, c. St. Just	91 5 0 ..	300	488 15 0 ..	5 0 0 ..	May, 1866		
20000 British slate Company	8 0 0 ..	—	9 per cent.	—	Mar. 1866		
1000 Bronford L., Cardigan	12 0 0 ..	—	8 1 0 ..	0 6 0 ..	May, 1866		
916 Cargill, s-l, Newlyn	15 5 7 ..	12 ..	10 12 ..	13 15 0 ..	Feb. 1866		
867 Cwm Eifin, l, Cardiganshire*	7 10 0 ..	—	29 18 0 ..	1 0 0 ..	July, 1866		
128 Cwmystwyth, l, Cardiganshire*	60 0 0 ..	—	352 10 0 ..	5 0 0 ..	April, 1866		
280 Derwent Mines, s-l, Durham	300 0 0 ..	—	162 0 0 ..	2 10 0 ..	Mar. 1866		
1024 Devon Gr. Consols, c, Tavistock*	1 0 0 ..	440	380 400	1030 0 ..	6 0 0 ..	July, 1866	
358 Dolcoath, c, t, Camborne	128 17 6 ..	300 ..	813 10 0 ..	1 0 0 ..	June, 1866		
614 East Caradon, c, St. Cleer	2 14 6 ..	7 ..	6 1/2 7 ..	14 5 6 ..	2 6 ..	July, 1866	
300 East Darren, l, Cardiganshire	32 0 0 ..	—	113 10 0 ..	2 0 0 ..	May, 1866		
128 East Pool, t, c, Pool, Illogan	24 5 0 ..	—	379 10 0 ..	5 0 0 ..	July, 1866		
5000 East Rosewarne, c, t, Gwinear	2 15 0 ..	—	0 10 0 ..	1 0 0 ..	Jan. 1866		
1906 East Wheal Lovell, t, Wendron	3 9 0 ..	5 1/2 ..	2 7 6 ..	6 7 6 ..	May, 1866		
2800 Foxdale, l, Isle of Man*	25 0 0 ..	—	68 10 0 ..	0 10 0 ..	June, 1866		
5000 Frank Mills, t, Christow	3 18 6 ..	—	3 5 6 ..	0 5 0 ..	Feb. 1866		
1500 Great Laxey, l, Isle of Man*	4 0 0 ..	20 ..	19 20 ..	4 15 0 ..	0 10 0 ..	June, 1866	
5908 Great Wheal Vor, t, c, Helston*	40 0 0 ..	19 ..	185 19 2 ..	10 0 0 ..	0 10 0 ..	June, 1866	
1024 Herdofrost, l, near Liskeard*	8 10 0 ..	33 ..	39 31 ..	37 10 0 ..	1 10 0 ..	June, 1866	
6000 Hington Down, c, f.	5 10 6 ..	3 ..	—	0 10 0 ..	0 5 0 ..	April, 1866	
4000 Illogan, l, Cardiganshire, Wales	18 15 0 ..	—	470 0 0 ..	3 0 0 ..	May, 1866		
9000 Ma-le Valley, c, Caradon	4 10 6 ..	33 1/2 ..	31 1/2 33 1/2 ..	3 7 0 0 ..	2 0 0 ..	July, 1866	
3000 Minera Boundary, l, Wrexham*	1 0 0 ..	—	0 13 0 ..	0 3 0 ..	Mar. 1866		
1800 Minera Mining Co., t, Wrexham*	25 0 0 ..	—	202 8 0 ..	5 0 0 ..	Aug. 1866		
40000 Mwyndy Iron Ore**	3 5 0 ..	—	0 6 6 ..	0 2 6 ..	Mar. 1866		
600 Pant-y-Glen, sl,*	20 0 0 ..	—	—	10 per cent.	May, 1866		
200 Parry's Mines, c, Anglesey*	50 0 0 ..	—	157 0 0 ..	0 5 0 ..	Jan. 1866		
1120 Providence, t, Uy Lelant	10 6 7 ..	23 ..	21 23 ..	80 17 6 ..	0 10 0 ..	May, 1866	
512 South Caradon, c, St. Cleer	1 5 0 ..	—	529 10 0 ..	9 0 0 ..	July, 1866		
6000 South Darren, l,*	3 6 6 ..	—	0 5 6 ..	0 2 6 ..	June, 1866		
6000 Tincroft, c, t, Pool, Illogan*	9 0 0 ..	7 1/2 ..	7 8 ..	18 1 0 ..	1 0 0 ..	Jan. 1866	
3000 W. Chiverton, l, Perranzabuloe*	— ..	65 ..	60 65 ..	13 7 6 ..	0 2 0 ..	Aug. 1866	
512 Wheat Basset, c, Illogan	5 2 6 ..	80 ..	65 75 ..	62 1 0 ..	0 1 0 ..	Aug. 1866	
1024 Wheal Friendship, c, Devon	20 0 0 ..	—	300 0 0 ..	1 0 0 ..	Mar. 1866		
4296 Wheal Kitty, t, St. Agnes	5 4 6 ..	—	2 19 0 ..	0 1 6 ..	May, 1866		
2000 Wheal Rose, c, Scorrier	— ..	9 ..	5 6 ..	1 0 0 ..	0 10 0 ..	Feb. 1866	
396 Wheal Seton, t, c, Camborne	58 10 0 ..	135 ..	120 130 ..	226 15 0 ..	5 0 0 ..	April, 1866	
1040 Wheal Trelawny, s-l, Liskeard*	5 17 0 ..	—	8 9 ..	54 0 0 ..	0 5 0 ..	June, 1866	

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Pershare.	Last paid.
1053 Cradoc Moor, c, St. Cleer	10 11 0 ..	—	7 12 0 ..	0 4 0 ..	June, 1866		
1200 Bryn Gwyn, t, Moel*	9 0 ..	—	3 3 6 ..	0 13 6 ..	Aug. 1866		
2880 Clifford Amalgamated, c, Gwenap	30 10 0 ..	6 1/2 ..	7 1/2 8 ..	33 6 0 ..	0 10 0 ..	June, 1866	
6000 East Carrara, c, Redruth	3 15 0 ..	1 1/2 ..	1 1/2 1 1/2 ..	0 5 0 ..	0 5 0 ..	June, 1866	
23000 Mining Co. of Ireland, c, t, c.	7 0 ..	—	19 18 11 ..	0 16 1 ..	July, 1866		
6000 New Birch Tor and Vitifer, Cons. t	1 6 6 ..	—	0 13 0 ..	0 2 0 ..	Oct. 1866		
6000 West Bassett, c, Illogan*	1 10 0 ..	—	26 14 0 ..	0 5 0 ..	July, 1866		
1024 Wheal Exmouth, l, Christow	— ..	—	0 2 6 ..	Oct. 1866			
1024 Wheal Mary Ann, l, Menheniot	8 0 0 ..	3 1/2 ..	4 5 ..	59 17 6 ..	0 10 0 ..	Mar. 1866	
7000 Wicklow, c, Wicklow*	2 10 0 ..	—	—	15 11 0 ..	0 11 0 ..	Nov. 1865	

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Pershare.	Last Call.
15000 Cape Copper Mining*	7 0 0 ..	9 ..	—	2 12 6 ..	0 10 0 ..	April, 1866	
1500 East Indian Coal, Calcutta	10 10 0 ..	—	—	—	—	—	
25000 Fortuna, t, Spain**	2 0 0 ..	—	1 3 4 ..	0 3 0 ..	Feb. 1866		
10000 Gonnella, t, [5000 £5 pd., 5000 £2 pd.]	— ..	—	7 1/2 per cent.	per annum.	—	—	
15000 Linares, t, Spain**	3 0 0 ..	2 ..	11 6 4 ..	0 5 0 ..	Jan. 1865		
3275 New Wildberg, l	2 0 0 ..	—	0 12 0 ..	0 2 0 ..	Aug. 1865		
50000 Paniglione, c**	3 0 0 ..	3 ..	—	10 per cent.	Yearly.		
10000 Pontigland, s-l, France*	20 0 0 ..	—	2 19 8 ..	0 16 8 ..	Dec. 1865		
97500 Pon Phillip, g, Clunes*	1 0 0 ..	—	0 15 6 ..	0 1 0 ..	July, 1866		
20000 Scottish Australian Mining Co.*	1 0 0 ..	—	0 0 3 ..	0 3 ..	Jan. 1866		
11000 St. John del Rey, Brazil**	15 0 0 ..	48 ..	46 48 ..	68 15 0 ..	4 0 0 ..	June, 1866	
50000 Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]	— ..	—	0 9 0 ..	0 1 0 ..	Jan. 1866		
40000 West Canada Mining Company**	1 0 0 ..	—	0 19 6 ..	0 2 6 ..	May, 1865		

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Pershare.	Last Call.
10000 Alten and Quenangen United, c*	4 10 0 ..	—	4 5 0 ..	0 15 0 ..	Nov. 1853		
20000 Australian, c, South Australiat	7 7 6 ..	—	0 2 0 ..	0 1 0 ..	June, 1866		
2486 Burra Burra, c, South Australia	3 0 0 ..	—	325 0 0 ..	0 0 0 ..	Dec. 1864		
12000 Cobr Coop Company, c, Cuba	40 0 0 ..	1 1/2 ..	101 0 0 ..	1 0 0 ..	Jan. 1865		
100000 Don Pedro No. del Rey, Brazil*	0 14 0 ..	1 ..	3 1/2 1 ..	0 0 9 ..	0 9 0 ..	Dec. 1865	
10000 English and Australian, c	5 0 ..	—	1 12 0 ..	0 2 0 ..	Aug. 1864		
25000 Gen. Mining Assoc., Nova Scotia	20 0 0 ..	21 ..	21 0 0 ..	0 0 6 ..	June, 1864		
10000 English and Australian, c	5 0 ..	—	0 1 0 ..	0 0 6 ..	June, 1864		
25000 Kapunda Mining Co., Australiat	1 0 ..	—	0 1 0 ..	0 0 6 ..	June, 1864		
10000 Lusitanian (Portugal)*	2 10 0 ..	—	0 9 6 ..	0 1 6 ..	July, 1869		
103815 Marquesita and New Granada**	0 0 ..						